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a magazine for Shooters by Shooters

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COVER PHOTO

This is William J. (Bill) Grater, Camarillo, California, one of the Nation's outstanding young smallbore prone competitors.

Bill started his shooting career as a member of the Brea Juniors, sponsored by the Brea Rifle Club in the Los Angeles area, who under the leadership and coaching of Leland Auer set many national junior prone records a few years ago. He has continued as a worthy competitor in senior ranks and is now attaining his greatest successes to date. In 1963 he won the Northeastern smallbore prone championship in Connecticut. In April this year he won the California State smallbore prone championship. Since then he has won smallbore prone regional aggregates at Phoenix, Arizona and Fresno, California.

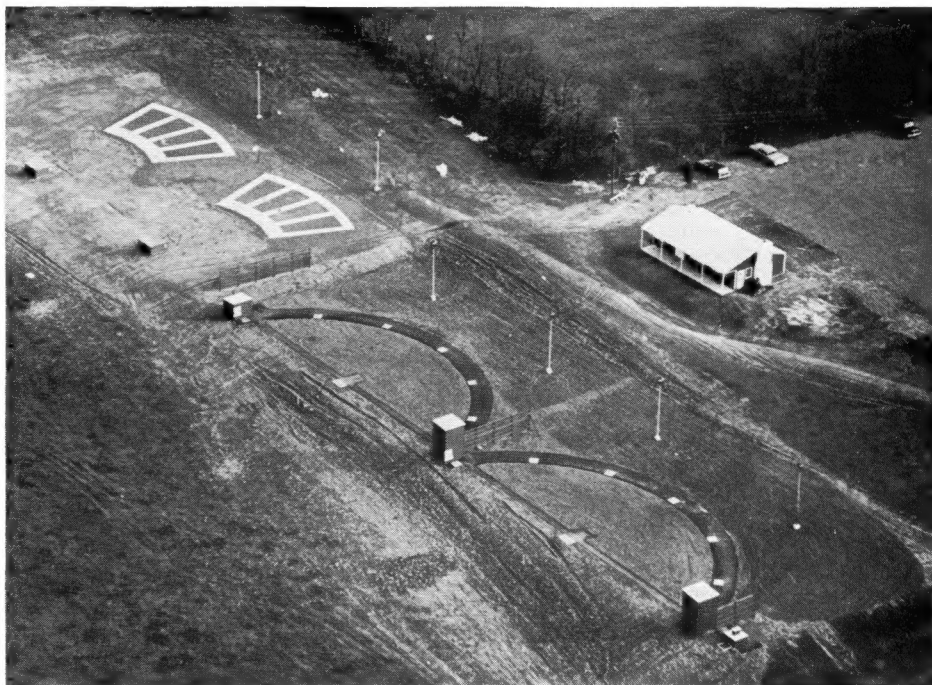
WHAT HELPS ONE, HELPS ALL

Very recently announced is the inauguration of the Winchester Franchise Gun Club Program to provide a nationwide network of public trap and skeet shooting fields. It is stated that between 40 and 45 of the Winchester Franchised Gun Clubs, located from coast to coast, will be opened during the remainder of 1964. Contracts for several of the clubs have already been signed, land purchased and construction is under way.

This program is a result of nearly two years of testing, including three pilot installations, two in the thickly populated Greater New York area and one in a less thickly populated area near Lubbock, Texas. Each Franchised Club facility will include two trap fields and two skeet fields, all lighted for night shooting, a practice field for instruction and warm-up, and a modern club house with rest rooms and lounge, with Winchester guns and ammunition available. The Clubs will be locally financed and have local management. Winchester will provide the national promotion, know-how, equipment and systems to provide a margin of profit.

Some of you folks will no doubt think that news of this Winchester program for shotgun facilities is of little if any interest to rifle and handgun shooters, but I feel otherwise. I believe that this program may prove to be of indirect but very real importance to participants in ALL the shooting sports.

Since these franchised gun clubs will be financed by a very considerable sum of local capital, excellent management and an aggressive selling effort will be required in order to make a profit and remain in successful operation. That means that many new shooters will need to be introduced to trap and skeet shooting as a recreational sport. For every new shooter introduced to the sport it is reasonable to expect that several other people will become better informed about the recreational sport angle of firearms use and that cannot help but improve the "climate" for all the shooting sports, thereby aiding in counteracting the anti-gun sentiment.



Aerial view of the Winchester franchised gun club at Clinton, N. J., showing the two trap fields, two skeet fields (both lighted for night shooting) and the club house. The practice field, which will be a feature of all Winchester Franchise Gun Club facilities, is not shown in this photo. This is the pattern which will be followed for all facilities constructed under the Winchester Franchise Gun Club program.

There are already a scattering of individually owned and operated commercial rifle and handgun ranges around the country, some of them in favorable locations being quite successful, two examples that I know of being Bob Hutton's Rifle Ranch near Los Angeles and the Blue Trail Range in Conn. The Shooter's Service and Dewey, Inc. facilities at Clinton Corners, N. Y. appears to have a successful potential.

Sufficient real estate could be a problem in heavily populated areas for ranges adapted to present military type highpower rifle ranges, but some membership clubs are adapting successfully to the 100 yard highpower course of fire and this would be adaptable to "safety ranges." Smallbore rifle and handgun are naturals for the "safety" type range, which will be a necessity for convenient urban locations. Bench rest, a desirable type of shooting for many handloading centerfire riflemen, would be very adaptable to the safety range. The new safety range being built by the National Rifle Association near Washington could and should be a research centre and plans provided for this type of range.

While I personally hope that I'll never be compelled to make use of such facilities for my own shooting, I am fully convinced that wide-awake, aggressive commercialism is the only hope for putting the shooting sports on a par with other popular participant sports, such as bowling, golf and skiing for major examples. I foresee the Winchester Franchised Gun Club Program as the beginning of a trend that may eventually benefit all of us in all the shooting sports.

P. H. T.

SAVAGE/ANSCHUTZ MODEL 153 SPORTING RIFLE

The SAVAGE/ANSCHUTZ Model 153 Custom Grade Sporting Rifle that I have been shooting and admiring for several weeks is a beauty in design, appearance, handling and shooting qualities. Neither words nor black-and-white photo can adequately describe it—one needs to see and handle it to fully appreciate it.

The rifle is available only in .222 Remington caliber and appears to have been designed especially for this caliber, rather than using some basic bolt action

and scaling the gun down for a light sporter in this caliber. The gun has many design features that I have never seen in any other bolt action rifle. The fitting, finish and workmanship is far better than on any U. S. production rifle that I have seen in recent years.

The bolt locks at the rear with two locking lugs, both slightly below the centerline of the bolt. The butt of the bolt handle serves as one locking lug. The opposing lug engages a recess in the receiver wall and travels in a slot in the bottom of the receiver when the bolt is opened. The positioning of the lugs permit a short bolt lift and the straight bolt handle, which projects from the stock far enough for very convenient grasping, does not interfere with a low mounted scope. The bolt body does not turn, the locking lugs and cocking cam being on a sleeve which turns on the bolt. The locking lugs do not cam into place—the bolt has to be pushed fully home before the lugs engage their seats.

The bottom of the forward section of the bolt is flatted with a guide rib projecting from its center. The cartridge follower in the box magazine is also flat. The cartridge follower does not contact the bottom of the bolt and the bolt travel is very free with a minimum of wobble and bind. The extreme bottom of the cartridge head is unsupported except for the guide rib on the bottom of the bolt. The extractor is of conventional claw type. When the bolt is opened, the bottom of the cartridge head projecting below the flat bottom of the bolt contacts a raised section of the bottom of the receiver, slotted for the bolt guide rib, and is thus ejected. The removable box magazine holds three cartridges, which with one in the chamber makes a four-shot repeater. This action system seems quite adequate and efficient for the .222 cartridge, but might not be for a more powerful cartridge. It illustrates my earlier point that the gun appears to be designed and built for the .222 cartridge.

The trigger is a single pull, compound type, in which the trigger proper releases a toggle which the sear on the striker pushes down for release. The trigger appears to be adjustable for both engagement and weight of pull. The adjustment of the

trigger on the rifle I have been testing was excellent to suit me, with as light a pull as I like on a sporter and with a minimum of over-travel. Since I was not familiar with this trigger mechanism, and the pull suited me "as is," I didn't do any experimenting with its adjustments. The firing pin fall is short and fast.

The safety, operated by a lever on a sleeve at the extreme rear end of the bolt, forces the firing pin back enough to relieve the sear contact and locks it. The operating lever is on the left side of the receiver and turns down flush with the stock to lock on safe. Release of the safety is both stiff and awkward—I have to turn the gun on its side to get my thumb under the lever for the needed stiff lift. If the operating motion of the safety were reversed its operation would be much more convenient, but not nearly so safe.

The stock is excellently designed and proportioned for a light weight sporter. It has a high, roll-over Monte Carlo comb and cheekpiece. The pistol grip is, in my opinion, properly shaped and positioned, and has the so-called Wundheimer bulge to fill the palm-hollow of one's hand. Forearm and pistol grip are very nicely checkered in a basket-weave diamond design—is both functional and attractive. I don't know what the stock finish is or how well it will wear under field use, but it certainly is attractive when new.

The joining of the barrel-action assembly to the stock is unusual. Under the action tang, a steel bushing some 1/2 to 3/4 inch long and approximately 1/2 inch in diameter, drilled through and threaded, is recessed snugly with the top and flush with the inletting of the wood to provide a generous and firm bearing for the tang. A short screw fastens the tang to bushing. A longer screw through the rear of the floor-plate and into the bottom of the bushing completes the firm fastening of the rear end of the action. A screw through the forward end of the floor-plate goes into the bottom of the receiver ring. There is no recoil lug on the receiver ring. Some three inches ahead of the receiver ring an enlarged ring is left on the barrel, into which a rear sight is dovetailed on top. On the bottom of this ring is dovetailed a steel lug similar in shape and size to the bushing under the tang. This lug is snugly recessed in the forearm and is drilled and tapped to accept a screw coming up through an escutcheon in the bottom of the forearm. Apparently a function of this lug, along with the bushing under the tang, is to take the place of the conventional recoil lug. A small screw through the floor-plate just in back of the magazine box opening engages a small lug inletted into the stock-wood from the top and merely supports the rather lightweight floorplate at this point—it does not contact the action at all.

The iron sights; folding-leaf rear with sighting notch plate adjustable for elevation and gold bead front; are high enough to permit comfortable aiming with the high comb stock and unobstructed aim over the top of bases for top mounted scopes when the scope is removed. (As an aside; when the Redfield No. 22 RW "Sharpshooter" aperture sight for use on grooved top receivers was introduced, I was sent a sample. On any grooved top receiver rifle I have had since, use of this sight would have required a higher than standard front sight and I've never bothered to install one. But with the high sight-line of this Model 153 rifle, this sight may be used with the standard front sight with plenty of leeway for elevation adjustment and is a very handy, inexpensive additional sight.)

The receiver top is grooved for tip-off scope mounts and is also drilled and tapped to accept bases for the conventional

top mounts for hunting scopes. There is room behind the rear base to attach the Redfield "Sharp-Shooter" sight.

The 24 inch tapered barrel is free-floating—and it IS FREE floating with uniform clearance around the barrel and no unsightly gaps between wood and metal along the top line of the forearm. The action is snugly bedded with nice meeting of wood and metal along the top line. It is a nice and serviceable inletting job.

The rifle is listed to weigh 6 1/2 lbs. The sample I have tips my scales at 6 1/2 lbs. with scope-mount bases and Redfield "Sharp-Shooter" sight attached.

Shootingwise; I have fired only handloads, with only one powder (3031) in one charge but with several different bullets, 50 through 55 gr. weights and both commercial and my own hand swaged bullets. Accuracy has averaged about 1 1/4 minute-of-angle with the better bullets. I feel confident this could be improved by some experimenting with powders and charges.

My appraisal is that this is an excellently designed, nice appearing, nice handling, good performing, high quality rifle for this popular .222 Remington cartridge. The rifle, with the open iron sights, is priced at \$175.00 with right-hand stock. It is not listed as available with left-hand stock, as are the SAVAGE-ANSCHUTZ target rifles. However, it handles very well for a left-hander who has had to accommodate himself to right hand actions—and I think that safety is more convenient to operate by a lefty than by a right-hander.

P. H. T.

LETTERS

Dear Phil:

While reading the May issue of PRECISION SHOOTING, with my usual enjoyment, I noticed one little item that I feel needs correction. In the article starting on page 5 and entitled 'Removing Lead with Mercury' by Jesse M. Grigg it is stated that no damage will be done to brass or aluminum ram rods on coming in contact with mercury. True, in the case of aluminum as this metal is always protected by the ever present film of aluminum oxide but very much not true in the case of brass. If you want to try it just rub a little mercury on one end of a brass rod, then put it aside for a few weeks. In fairly short order you will find that the mercury will have traveled the entire length and breadth of the brass with result that the resulting material can be crumbled with the fingers. Remember what mercury did to brass cases back when mercurial primers were in use.

Paul McK. Deeley
New Jersey

Dear Phil:

This is a note of thanks to the many precision shooters that I have written and talked to over the last two years.

It is my sincere belief that without the aid of these people I would not be shooting today. I saw my first bench match two years ago, and from that day to this it has been my desire to compete in this type of match.

This year will be my first attempt at the bench game. My gun is not the best, and I'm not rich, but I have a desire to shoot and a willingness to compete and this I owe to a swell group of people that call themselves Precision Shooters.

Frank Twill, Jr.
Massachusetts

THE BLUE TRAIL RANGE

Home of: The Conn. State Rifle & Revolver Ass'n. Shooters and families welcome—90 miles from New York World's Fair.
120 covered firing points—25 yds., 50 yds., 100 yds.—lighted.
50 pit operated targets at 200 yds.
Shotgun area—Snack Bar—Lounge—Store—Rest Rooms. Send for free 1964 program and brochure.

316 North Branford Rd.
Wallingford, Conn.

COMING MATCHES

(We will list place, date, type and title of match, name of sponsoring organization, name and address of contact person, at a nominal flat rate of \$2.00 per insertion, prepaid with insertion order. Insertion orders must reach the Precision SHOOTING office, 64 Depot Street, Lyndonville, Vt., at least 45 days before date of match for single insertion orders. For multiple insertions, 30 days additional must be allowed for each additional insertion desired.)

SHERWOOD, OREGON: August 15-16; Pacific Wonderland small bore 200 yard match—50 shots iron sights and 50 shots any sights at 200 yards. Tri-County Gun Club, Wallace McKenzie, Sec'y, 17380 SW Marjorie Ave., Lake Oswego, Oregon.
MURRYSVILLE, PA.: Aug. 8-9; The Franklin Twp. Free Rifle Championship, 50 meter 3-position. Murrys ville Rifle Club, William R. Funk, 3336 Sardis Road, Murrys-ville, Pa.

CEDAR RAPIDS, IOWA: July 26, The Cedar Rapids 2700 Pistol Tournament. Trophies for awards in individual and aggregate matches in all classes. Write Paul Kosek, Sec'y, Linn County Rifle & Pistol Club, 87 16th Ave. S. W., Cedar Rapids, Iowa.

PUBLIC RELATIONS IMPORTANT

Dear Phil:

From a public relations point of view, shooters are the most inept people I know of. They constantly talk about the importance of their sport and the necessity to promote it. But despite all this it is a rare occasion when they do anything about it. As shooters, we might as well realize right now that the only successful way to combat anti-gun legislation is to make disciplined, safe, range type shooting a recognized and accepted sport by the general public.

Let us consider bowling balls. If you collected bowling balls and there was no place to use them, people would look at you as though you were mentally deranged. People now ask why shooters want all these guns and where and how they intend to use them. Try answering that question to the non-shooting public.

We in St. Paul (and to some extent in Minneapolis) have tried to approach this problem through an annual banquet sponsored by the St. Paul Rifle and Pistol Shooters' Club and to which officials of the city and state governments are invited to speak. To date our effort may not have made the headlines but we have made a beginning and I, at least, expect it will grow.

A few weeks ago we had our 35th annual banquet. The city commissioner of parks and playgrounds was present as was also the chief of the state firearms safety program. Both people spoke and both expressed gratitude for the privilege to speak. These banquets have taught me one thing. Any political officer up to and including the governor of a state is happy to go before a group such as this and say a few words. The only requirement is bodies—a sufficient number of them. If a minor official will come to a dinner for 150

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Letters

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people, the governor will come if the group is increased to 250 people. And so it goes. If you can furnish the numbers, you can invite anybody and if the numbers are there they will come.

At this last dinner it so happened that I was master of ceremonies. After the usual preliminaries and before introducing the speakers, I read as a news item the first paragraph of your note in the March issue of P. S. concerning the Triple A's inventory of California ranges. I pointed out the fact that Triple A was making the inventory was not in itself important. What was important was the fact that there were enough ranges to make such an inventory possible. The commissioner's remarks told me that my point had not fallen on barren ground.

Incidentally, while I'm on this subject, it may be of historical interest to point out that Harold Stassen who was then governor of Minnesota did attend such a dinner and did speak to our group. But the situation at that time was a little different because Stassen was a competitive shooter and he is still remembered as a member of a winning University of Minnesota rifle team. His shooting partner was Doc. Swanson who is still in the game and who is still hard to beat.

Fred W. Hallberg
Minnesota

A "NEW" CARTRIDGE

Dear Mr. Teachout:

This letter may have limited value to most of your readers, but I think it very interestingly points up the old principle that "There's nothing new under the sun."

A couple of years ago I had Bill Funk, one of your contributors, pick me up a Model 1911 Swiss Army rifle on one of his trips through Alexandria. The rifle was of excellent workmanship and with its fast, straight-pull bolt and .3084" (as slugged) groove diameter, it looked like it might be a real winner in a .30 caliber DCM match. The only problem was that 7.5mm Swiss brass was a little too weird to duplicate. It had a .500" case head and .30-06 brass (.470" head) bulged badly and off-center in the fireforming process. Magnum brass (.513 head, .532 rim), even when turned down, couldn't be formed to fit without more elaborate tooling than I had. There was almost nothing in between, so it looked like I had a real orphan. (Swiss brass has a mercuric, Berdan primer, so I could forget that possibility.)

And then, in one of its greatest advancements in years, Winchester revealed its brand new, all new, revolutionary, short bolt throw, high intensity .284 Winchester cartridge.

Despite the rebated rim (.470, to work with standard bolt faces) and the neck reduced to accept 7mm bullets, the head diameter, body length and taper, and shoulder angle, proved it to be a very old friend indeed. One of our newest American cartridges was designed by a Swiss in 1889.

Understand that my facetiousness is meant to evoke laughter, and is not a criticism of Winchester. I'm glad they were able to recognize the potential in a cartridge case with the capacity of a .30-06, but with a straighter body, sharper shoulder and shorter overall length.

All I'm saying is; (1) you 7.5 Swiss owners can now go have a ball, courtesy of Winchester and (2) don't think that if you dream up a 30/284 you have a wildcat. In its present form, it's been in constant production as a military round since 1911.

Frank Franz
Iowa

THE SHOP

By Roy F. Dunlap

Enjoyed Fred Hallberg's letter on stocks. The Wundhammer swell is a good feature—I've used it on my stocks for ten years or more—but it is critical. Unless the grip is made somewhat undersize, the bulge will not be comfortable to very many people—the S & L is quite small. If the grip is too large for the specific hand, the bulge makes it feel even larger and clumsy—you don't get any "feel" at all on the stock. My prone bullgun stock uses a grip that is about 90% swell and I've always thought the reason it was not too popular was that the grip could not be tailored exactly to fit the individual owner's hand, when he fitted the stock himself.

I've done something again which confuses me as to whether or not it pays to play. Took a beat-down German "Erma" .22 conversion insert for the 8mm Mauser '98 military rifle and altered it to fit one of my M70 match rifles. The alteration ain't easy, especially turning down the .310" barrel tube to .298". Said tube having numerous curves and one kink in it to start with. I have not checked headspace in the unit as I know it is too much and knowing how much would only discourage me. So I took the bolt out of the 28" M70, slid the unit in and locked it and went to the range Sunday morning. . . . Somebody took all the target frames home and I jury-rigged a holder at 75 yards with 100 yard target. . . . took four shots to sight in. This idiot combination stayed in 1 inch at 75 yards, old Expert ammo, with iron sights, and front aperture (.075) too small for good sighting. I'm sure the rig is capable of high-X possibles at 100 yards! Firing pin spring is weak, too. The barrel tube is about 23" long. I've been trying for years to get the Germans to make this rig for the M70 action and .30 caliber barrels, but they won't. Be nice for big-bore shooters to be able to practice their positions and shooting in gallery during winter. I fixed my insert so it can be used in .308, .30-06 and magnum chambers. Didn't expect much in way of accuracy but the deal shoots as good as any factory match rifle and better than a lot of them! A thin rifled tube, held straight only by the .30 barrel around it, with .001" tolerance all around, and it can't be uniform. . . . I fired only about 40 rounds, but no flyers, no changes from heating up. Now I got to find another one of the gadgets to fix up for my wife to use in her 70 match rifle and bullgun for practice.

Some good .30 match bullets showing up. . . . the Remington 197 gr. match openpoint now available to civilians; Hornady has a 190 match job about ready for market, already tested with very good results here at 300 yards, not enough bullets to learn much at longer ranges; Norma's heavy match boattail available. Remington's 180 boattail match bullet does fine in my 12" twist Douglas barrel and Western 180 delivers at 600. The Sierra 200 grain wobbles like a banana in the spinner, but it holds less than a minute vertical at 1000 yards in the bullgun. All this discourse just means that no matter what kind of .30 barrel you have, if it is any good at all, you can find a bullet that will shoot in it. Sierra's 168 gr. match bullet gives magnificent accuracy with many different loads in the majority of rifles, but wind discourages it beyond 300 meters.

The same Erma outfit what won't make me Model 70 .22 conversions has just brought out a .22 pistol. .22 Pistols ain't news, except that this one is modeled on the Pistol M'08—and it's a .22 Luger! Wouldn't mention it except that a few weeks back I got in a Furter free pistol (Swiss) for an AF shooter. . . . from the literature we couldn't tell what the action was—it looked like just a barrel with a grip, trigger and monstrous extension rear

sight. So we bought one to look at it. Action proved to be a manually operated slide-bolt and toggle locking system, ala Luger. Furter makes a free rifle too. No American would buy it—looks too plain, simple and cheap. However, Muller, the Swiss master, uses one and has about the highest average in the world at 300 meters for the past two years.

Elimination of the military standing position in all big-bore shooting this year has already influenced rifles. I am now using 28" and 29" bullgun barrels, 7/8" at muzzle, on over-the-course target rifles for many shooters. They can rest the arm against body and hold the added weight standing—and the scores out here show it; two points or so for a 20 shot match. Possibles within reach of second-rates like me, who used to be happy with a 95 or 96. Word of warning, though. . . . unless you're strong, with a solid sitting position, don't add too much weight, or the 200 yard rapid will suffer. An increasing number of top .30 men using leather shooting coats for standing stage. They shoot 99 and 100. I shoot 97 and 98, so I'll try too. Ordered four sizes of leather coats from Finland—one ought to fit me! Price is right, at least.

Anybody able to furnish 200 yard German Ring Targets? Oakland Rifle Club wants some—advise them, 17474 Ehle Street, Castro Valley, Calif. Wonder when we'll get a new big-bore target. Last experimental was Jim Crossman's baby, and was considered too complicated in scoring procedures.

For past week I've been laboring on writing job—three chapters for a big gun book coming out, one each on smallbore, big-bore, and bench rest. It ain't easy—each one could be a 300-page book by itself. Full coverage impossible, mustn't leave out anything pertinent to shooting or equipment, and word it so every reader can understand, even if he's never been acquainted with shooting. And not offend the people who know more than I do!

TOURNAMENT CIRCUIT

MURRYSVILLE, PENNSYLVANIA

On May 16 and 17, sixty-four riflemen from ten states and one Canadian province competed in the Olympic Preliminary Try-out, small bore at 50 meters. The Murrysville Rifle Club's International Course range had recently been enlarged to 24 firing points, and it was well that it had been. Six Air Force shooters from Lackland AFB, Texas, found stiff competition from civilian shooters.

Jim McHugh, a 20 year-old student from Philadelphia, hitch-hiked across the state, won the match by a five point margin with his 1148-12x score, and then hitch-hiked back home. His 389-6 prone ranked 12th, his 383-3 kneeling was 3rd, and he had high standing score of 376-3.

Another student, Jack Writer at University of West Virginia, took runner-up spot with his 1143-19x. He had 5th ranking prone of 395-15, he was high for kneeling with 386-10, and runner-up standing with 362-1.

A. H. Hannon, USAF, was 3rd with 1121-21x and his 395-15 prone also ranked 3rd. M/Sgt. Edward E. Caygle, Jr., USAF, was only a point behind with his 4th place 1120-14, and his 383-5 kneeling was good for 3rd in that position. R. B. Trew, Bentleyville, Pa. was 5th with 1118-16.

Rounding out the top ten were: E. J. Nilson, USAF, 1117-19; R. L. White, New Boston, Mich. 1115-14 and 357-2 for 4th standing score; T. N. McMillion, USAF, 1114-6; Capt. J. T. Bertva, USAF, 1112-11 and third place 357-3 standing. R. K.



The Cedar Rapids Pistol Club (Iowa), the winning team at the First Annual Cedar Falls Police Pistol Tournament held May 17th. Left to right, Paul Kosek, Chuck Klimm, Jack Rezabek and Ralph Colby.

Moore, Claysville, Pa., with 1101-15 outranked P. D. Bahman, Arlington, Va. with 1101-17 by virtue of his 2 point higher score prone. L. A. Wilkens, Seville, Ohio, fired high prone score of 396-10x.

Five high in the English Match (60 shots prone) were: L. A. Wilkens 592-14, C. E. Runge, Toledo, Ohio, 591-7, J. Writter 591-13 (this is correct by ISU ranking rules), A. H. Hannon 590-21, and E. J. Nilson 590-19.

CEDAR RAPIDS, IOWA

The First Annual Cedar Rapids Police Pistol Tournament held May 17 was attended by 96 police and civilian competitors. All matches were fired with any center fire guns over Camp Perry courses of fire. Richard Ward, an Iowa Highway Patrolman from Tipton, Iowa, was the grand aggregate winner with 1142 out of 1200 points.

Paul Kosek, Cedar Rapids, was high Master with 1131, and high civilian Expert, Clifford Demaris, Waterloo, Iowa, also scored 1131. High police Expert was Jim Swanson, Burlington, Iowa, with 1113. High civilian Sharpshooter, Harry Gordon, Bettendorf, Iowa, scored 1104 and high Police Sharpshooter, Calvin White, Altoona, Iowa, also scored 1104.

Twenty police and civilian teams competed in the four-man team event. The Cedar Rapids Pistol Club team fired 1146 to edge out the Moline, Illinois, Civilian team's 1142. The Sharpshooter class Rock Island Police was the high scoring police team with 1116.

FRESNO, CALIFORNIA

Ninety-five shooters participated in the Pacific Southwest Smallbore Prone Regional tournament on the Fresno Rifle and Pistol Club Range, May 23 and 24.

William Grater, Camarillo, Calif. won the two day grand aggregate with a 3192-239x score, in conditions reported to have been nothing to brag about—temperature in the 80's and gentle breezes. Grater shot a 1596 with iron sights Saturday and followed it up with another 1596 with any sights on Sunday.

Bob Perkins, Fresno, was runner-up with 3190-222. He won the any sight aggregate with a 1600 possible, the first such possible score ever fired on the Fresno range.

Cliff Pierson, Sun Valley, Calif. was 3rd with 3185-207; Henry Benson, Salmon, Idaho 4th 3182-225; Forrest Kline, Pasadena 5th 3176-191; and George Stidworthy, Prescott, Arizona 6th 3174-215.

High Service shooter was Capt. Lockstrom, Travis AFB with 3167. High Woman was Capt. Pauline Bordas, Travis AFB with 3154.

ROSELAND, NEW JERSEY

A near range capacity entry of 59 shooters competed in the Metropolitan

Rifle League (NYC) Outdoor Smallbore Championship on the O'Hare Rifle Range at Roseland, N. J. on May 24th. After getting off to a slow start with a 10th place 398-14 in the opening 50 meter any sight match, and winning only one of the three fired matches, Rans Triggs won the 1200 point aggregate with a score of 1197-94x. Placing no better than 4th in any fired match, F. Boyd ended up only a point behind Triggs with 1196-76x for runner-up spot.

J. O'Hare was 3rd with 1195-81, Loren Samsel 4th with 1194-83, J. Holle 5th with 1194-73, and high Expert S. Lapointe 6th with 1194-53.

Masters Ken Stannard and Fred Triggs, and Sharpshooter J. Clark each scored 400-31x in the opening 50 meter any sight match to rank in that order.

In the any sight Dewar match, five of the six top scores were fired by Experts. W. Heil won with 400-33x, Rans Triggs had 400-32, W. Ritchie 400-29, J. Maher 400-25, S. LaPointe 400-22, and M. Alvis 400-20.

Rans Triggs won the iron sight Dewar with 399-28x, Kristin Sundstrom runner-up with 399-24x, and Marksman D. McNamara 3rd with 398-20.

LIBERTYVILLE, ILLINOIS

Seventy-three competed in the "Season Opener" outdoor Smallbore Tournament on the Libertyville Gun Club range on May 24th. Weather conditions are reported to have been at the "usual worse" on the tough Libertyville range, with a strong and unsteady tail-wind. This was an old-timers field-day with age and experience consistently triumphed over youth.

Al Freeland, Rock Island, fired the only 400 possible of the day (possibles are commonly rare on this range) to win the any sight Dewar, won the any sight aggregate by a 4 point margin, and did well enough with iron sights to edge out Jesse Grigg, Springfield, Ill., and Marshall Grosskopf, Marion, Wis. by narrow margins to win the grand aggregate. Freeland scored 1581-88, Grigg 1580-81 and Grosskopf 1579-91.

Jesse Grigg, with 70 odd years behind him, placed 3rd at 100 yds. any sights, 14th in the any sight Dewar, 4th in the 50 yd. iron sight, won the 50 meter iron sight with 399-24 and the iron sight aggregate with 796-46, for 2nd in the grand aggregate.

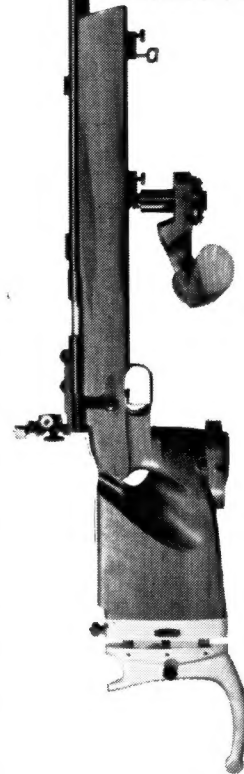
Marshall Grosskopf didn't do better than a 2nd place in any fired match (two of them) but was 3rd in the any sight aggregate, 2nd in the iron sight aggregate and tight on Grigg's heels for 3rd in the grand.

Harry Tevis, Park Ridge, Ill., won the 50 yard iron with 399-25, was 3rd in the iron aggregate with 793-52 (outranked by

(Continued on Page Eighteen)

olympic selection

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dominates
international
smallbore
matches

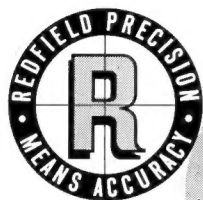


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GRATER PRECISION IN PRONE-SHOOTING VIA GRATER THEORIES

By Betty Summerall Duncan

Shooting stars fall within one of three categories. Regrettably, there are those who guard their secrets and show no concern for shooters on the way up. Then, there are others who prefer to "sell" their stories, but, unfortunately, very little ever appears in print which is of great benefit to their readers. Finally, we come to the category which I should like to term, "the thoroughbreds." Their concern is for the betterment of the shooting game. Many of them, we have already featured within these pages. Their reward is the satisfaction of knowing that they have made an invaluable contribution to their fellow-shooters by honestly revealing the techniques and theories which have made them great. If my mailbag is any indication, it has been worthwhile.

Requests have been numerous—from the famous and not-yet famous—for a story on prone shooting, incorporating the theories of one well-known smallbore champion. **WILLIAM J. GRATER** has explored the technical and scientific aspects of his prone specialty with a thoroughness which has commanded respect from the most formidable of his top echelon contemporaries.

The psychological moment, for penetrating the reluctance barrier and for extracting information, arrives when the shooter is "hot." And currently, Bill Grater is as "hot" as any shooter in the country. Augmenting his combined California State and Western Nationals Championship sweep, Bill captured two regional titles—the Far Southwestern and the Pacific Southwest—on successive week-ends. All this, within a 6-week span.

Bill attributes his phenomenal 10-point lead at the 4-day Los Angeles tournament to a factor which has been the subject of heated discussion—a **light trigger**. "I found that the light trigger rule (Rule 3.2) was a definite advantage in my controlling of the let-off and holding. When rough conditions were prominent, the light trigger enabled me to wait for that exact instant when the conditions were the same. It was evident that this was to an advantage with a score of 200-17X on the 1st stage of the 100-yd. iron, which everyone agreed was the roughest stage of the tournament.

"I honestly feel that I could have cut my regional scores in half, in relation to points dropped, with a light trigger for two reasons—: (1) in switching conditions, you can get your trigger off quicker; (2) I have a personal problem of jerking to 4 o'clock when I am shooting fast. In anticipation of a jerk to 4 o'clock, I subconsciously heel the rifle with a bad break to 10 o'clock. It might be pointed out that each person has a different locale of jerking, but these two areas are the most prominent. There are two other areas where shooters tend to lose shots. One, of course, is the known one of the 12 o'clock area, which is due to loss of control in holding due to emotional factors. The other is the 6 o'clock area, which is definitely due, in my thinking, to shouldering the rifle.

"Each individual shooter has his own particular trigger weight, and there is no criterion of specific poundage to fit a group. When a shooter wishes to find his ideal trigger weight, I think it is essentially a 2-stage operation. The 1st stage can be done in a dry-firing position. With the trigger adjusted lighter, and dry-firing, he adjusts it until he feels he can control it completely. Then, the shooter goes into the 2nd stage, where he actually does practice firing with live ammo. He may find that under tournament conditions, and even live ammo conditions, that he wishes to adjust the trigger a little bit lighter. This takes care of the normal psychological

tightening up under match conditions. But, he must never lose that control! I find that with my Kenyon trigger, which, when set for the 3-lb. rule, feels lighter than other triggers which are 3-lbs. My setting of weight is at $1\frac{1}{2}$ to $1\frac{3}{4}$ lbs. under rule 3.2. This may be lighter with other types of triggers. I have experimented with the Kenyon trigger and have successfully held the weight at 6 to 8 ounces without a malfunction.

"It might be advised that with a light trigger, the shooter should do some work—custom or otherwise—with the pistol grip. With a light trigger, you no longer use a complete squeezing action of the hand. The squeeze with a 3-lb. trigger may be likened to squeezing a large sponge where you use the whole hand. With a light trigger, you use a grip to fit your hand, and release the trigger only with the movement of the trigger finger itself. The shooter will realize this difference of squeezing with the trigger finger or with the whole hand if he lays his thumb completely around the pistol grip. I find that if you use this type of grip in smallbore, it tends to make the trigger feel heavier. My personal way of holding a rifle tends to be a bad habit. My thumb feels most relaxed directly behind the bolt." (See cover photo) "But, the right-handed shooter should try to rest his thumb alongside the action."

Proceeding to the next tension point in position—**cheeking pressure** and the **tension on the neck** in the prone position—Bill offers some interesting ideas on stock design. "I shoot an offset stock, and the reason I do is to eliminate the tension on the neck. When you shoot a straight stock, and you shoot in a low position, to enable you to hold steady, you have to lay your head off to the right side at an angle to get the proper cheek pressure and align the sights. This does two bad things—: it puts your neck in a strain, and makes your shooting eye align the sights at an angle, thus fatiguing the eye. By shooting an offset stock, my cheek rests with a firm tension on the cheekpiece, with the head straight up and down, and my shooting eye is aligning the sights in a normal position. Thus, I can shoot without fatiguing, without losing my holding capabilities, and without losing the sharpness of my eyesight for sighting. My stock is offset $\frac{3}{4}$ inch. If one is going to build an offset stock, he should offset it at least $\frac{1}{2}$ inch, and maybe $\frac{3}{4}$ inch, depending upon how wide one's cheek bones are. When a shooter changes to an offset stock, he has a tendency to feel that he isn't cheeking tightly enough; however, he is in reality cheeking just as tightly as before. He has merely eliminated the strains which he was experiencing with a straight stock."

Grater agrees completely with Ed Cayle on the five points which cannot be changed without changing the point of impact of the rifle (March issue, page 6). It is their interpretation of the manner of application of pressure at the five points in which you may note a variance from time to time. Also, Bill approaches it from a somewhat different angle. "The next three pressure points in shooting position tie altogether. They are: **pressure at the fore-end stop, pressure on the shoulder, and sling tension**. Pressure on the left hand has to be constant and without strain. The secret is to have the gun cradled in the hand, but with tension on the fore-end stop in contact with the hand to steady it. There should be no strain or effort in trying to hold the rifle while in position, nor should there be fatigue in holding this position for long periods of time. Each shooter should experiment to arrive at the proper fore-end stop which fits his own particular hand. I shoot with a very thin shooting glove—one which protects the hand from the metal surface of the fore-end stop, but does not eliminate the feel of the

control of the rifle. Many shooters use a sling swivel or some type of stud in the fore-end plate as a fore-end stop. They then use a heavily padded glove to counteract the strain and pain. This, they are fighting, although they don't know it. They should use a fore-end stop with a taper to fit the hand, or even a round fore-end stop, of about an inch to 1½ inches in diameter so that it fits the hand without riding on the two bones of the finger and the thumb. The use of the sling swivel and thick glove also hinders the shooter from accurately calling his shots. Consequently, if his point of impact changes, he does not know whether it is due to conditions or his hold."

Continuing, "The sling tension should be tight enough to completely steady the hold, but not to make the shooter uncomfortable. There are two theories of thought on where to place the sling on the arm. One is to put it up high or in the middle of the muscle in the arm, and the other is to place it low. If a person will observe the top shooters, almost all of them shoot their sling or arm cuff in the lowest possible position it will go on the arm. I shoot an arm cuff, because it gives me a wider area for support on my arm and I have less tendency to lose circulation, as occurs with a narrow sling."

He considers, "The final item of these points is the most important—**tension of the butt on the shoulder**. I would like to emphasize that all of a shooter's rifles **must** be the **exact** same length and fit. Most shooters have their rifles too long. It is better to have a rifle too short and shoot it that way than to have one too long and try to shoot a score. Most people think there is a standard pull measurement between trigger and butt. This is a fallacy. Each man is built differently, and his stock should fit him only.

"It wasn't until April of 1963 that, after many years of working on stocks, I finally arrived at the proper length for my own rifles. Previously, I had changed rifles quite liberally, trying to stock 8 different rifles the same. I know now that that was wrong. The old axiom of getting one rifle to fit you and then shooting only it is a very good one. It took between 6 and 7 years to finally arrive at the proper design of an offset stock to fit me. But, when I was satisfied with the final dimension of length and have since shot it consistently, my scores have made the most evident jump in quality."

Read this carefully—: "The shoulder should be in the extreme forward position rather than in the extreme back position when in the shooting position. One will find that the shoulder will feel more relaxed when it is forward than if it is forced back. Also, if under tension-mounting conditions your shoulder quivers, it has less distance to move forward, thus eliminating the possibility of shouldering a shot low. Another secret is to sight in on the sighter bull of the target, follow the old rule of dryfiring a shot off, completely relaxing and closing the eyes, and then looking to see if you are aligned on the target. If you are not aligned, align yourself so that you are. Then, sight in. When you go from your sighter to your record bull, repeat the same procedure, and do so on every bull that you shoot. You will find that you move your butt on your shoulder slightly up as you go down on your record. This eliminates the problem of two different points of impact.

"Contrary to belief, I find that pushing on the toes to get the proper alignment on the record bull does nothing but add a tension to one's position. The minute you relax and go into a subconscious let-off, your point of impact will be high, and we all know that no one can afford to lose shots through his own fault. If, when you move your butt on your shoulder to com-

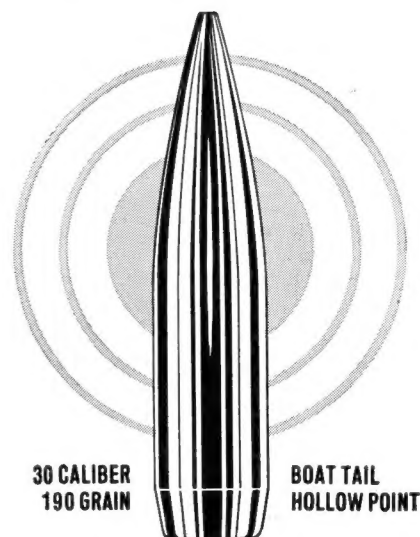
pensate for the proper alignment, you find that you are under a strain, this tells you that you have to adjust your butt plate. The position of the butt plate on your shoulder will correct for elevation alignment, but you will have to pivot your body on your left elbow to correct for windage alignment. This alignment must be done for both elevation and windage on each bull at short range, whereas at 100-yds. you only need to adjust for elevation. Once your windage is adjusted, it shouldn't change."

Grater expresses an interesting viewpoint here: "The fit of the coat and the fit of the cuff and sling are as important as the fit of the stock. My coat was custom made. Howard Smith (10X) took my measurements while I was wearing one sweat shirt, which I always wear. Without the sweat shirt, the coat wouldn't fit properly. It is important that the elbow pads, sling pad, and shoulder pad be in the proper position for each physique. There is a secret in the way I have my coat made which may be of interest. The sling pad is placed right next to the elbow pad, so there is no material between. Also, the shoulder pad is not up over the top of the shoulder as is used for 30-caliber shooting. It is down lower with the complete pad being on the front of the jacket. I use a zipper for two reasons. (1) The coat fits snugger with the sweat shirt on, thus—no dead space; and (2) even though in most cases I leave my jacket on all day, on ranges where there is no cover, I can quickly slip in and out of it, which helps the fatigue and comfort angle. . . . When I talk of dead space, I mean that the coat should fit snugly, but yet, not binding, as binding does not help you hold tighter, but puts you under a strain. This is where I break away from the users of the leather coats. Their idea is to get snug in the jacket, as in a corset, thereby enabling them to hold tighter. All this does is to put them under a strain, and they cannot detect a good hold from a bad hold. I purchased a German leather shooting coat in Europe, and I found that when shooting the high Int'l prone position, it does help to steady you, but that you are under a strain. I do find that the leather coat helps you to hold the ISU prone position, but does not let you go low for conventional American prone shooting.

"In the recent Russian manual, which deals with mechanics of the human body, it states that the lower the prone position, the steadier the hold. It might be pointed out here that although the Russian manual states this fact, through my own experience, I have found that there is a certain point where you lose control and holding capabilities, if you get too low. Most shooters adapt themselves to a comfortable, steady position, and from then on use that particular sling adjustment. But, this is where they make a mistake. In the course of a year of competitive shooting, using the heaviest and finest leather I can find, I still found my sling and components stretched up to an inch. If you leave your sling adjustment the same and do not compensate for this stretching, you will find that, although you feel you are holding well, there is something wrong with your scores. This is the point where you start to lose your holding and control, and should adjust your sling to eliminate the problem. My sling has holes in it ¼ inch apart so as to adapt to this problem, plus enabling me to make minor adjustments for different types of ranges which are not flat. This also goes back to the use of the butt plate adjustment to help compensate for ranges which are not flat. . . . The fact that the Russians do not realize that there is a point at which you can go too low is explained by the fact that their lowest prone shooter is higher than our average

(Continued on Page Eight)

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Grater's Theories

(Continued from Page Seven)

American prone shooter due to the prevalent Int'l rule. I shudder to think of the scores that could be fired in Int'l competition with the top American prone shooters shooting the legal American prone position. Some day maybe they'll take this handicap away."

According to George Stidworthy, Grater has the most perfect reloading technique he has ever seen. Bill, himself, feels: "One of the greatest reasons why my prone position is termed 'the ultimate' is my technique in loading. I do not know who the originator was, but since I was 9-years-old and started shooting, I have always had a rifle fit me so as not to take the butt down from the shoulder. There are those many shooters who try to duplicate this style of shooting prone, but the majority of them fail because they neglect to do damage to their stocks. I say 'damage,' in the fact that they don't want to cut their butt stocks off. The secret is to bring the action back toward you, and once you have gotten the proper tension points, which we discussed before, and you still cannot load without taking the rifle down from the shoulder, you must then begin to move the fore-end stop forward and cut the appropriate amount off the rear of the butt. This way you continue to keep the proper tension, yet you bring the action to the rear, enabling you to load without taking the rifle down. On an average, this requires the shooter to cut $\frac{3}{4}$ inch off the stock. Again, I would like to point out that each person has his own length of pull. I am long-armed, yet my pull is 13 inches from trigger to butt plate, where a standard factory rifle is 13 $\frac{3}{4}$ —so, the average person with average arm length should be 13 inches or possibly less. The next question which arises is that the shooter will say that he loses the balance of the rifle when he cuts that much off. This is where I have come up with a certain sized barrel diameter for my size and strength to keep that balance. Some shooters will have to have light barrels; some shooters, heavier barrels. But, you must not overgun yourself. It is better to have a rifle a little on the light side than one too heavy.

"The balance point should be well behind the wrist in the prone position. It could be that the center of balance should lie between the wrist and the elbow point, so as to aid the steadying of the hold with a slight amount of weight forward. The position of the left elbow should be slightly to the left of the rifle. The right elbow, when in position, should be in one place and you should be able to move your forearm and hand, pivoting on the elbow point, without a change in sight alignment. This enables you to load the rifle without any fatigue, loss of sight alignment, or lost motion. It also takes the strain off the left elbow, because you do not have to roll your rifle over to insert the cartridge... In my steady, low position, I no longer have, in actuality, an elbow point. I have 3 elbow points, with a flat spot in between these 3. This eliminates the problem of unsteadiness due to a sharp elbow and also the pain encountered with a high position and a sharp elbow point. In order to tie in all these components, it requires a lot of experimentation.

"My particular barrel size is a standard $\frac{1}{8}$ inch taper, 1 $\frac{1}{16}$ inches at the action, and 15/16 at the muzzle. The length of the barrel roughly is between 28 and 28 $\frac{1}{2}$ inches, depending on where the barrel fitter cuts it off, but I specify 28 inches in length. The front iron sight mount must be the same length from the rear iron sight base on all rifles; otherwise, you have a variable in size of the aperture

that you are shooting with on each gun.

"I have experimented with all types of barrel steels and have come to an interesting conclusion, something that cannot be chemically or physically explained. That is, stainless steel barrels have a tendency to buck the wind better. I do not know whether it is the uniformity of physical properties which enables the barrel maker to cut a more uniform barrel with stainless steel, or that it cools quicker, or if it is due to the particular process they use in rifling it."... (Note: Bill, let's hope that you can buck the wind in the event that certain gunsmiths should challenge you on this sentence.)... "But, this has been proven to me to the point that I only use stainless steel barrels now.

"One day several prominent shooters approached me concerning the type of barrel I was shooting and what I would recommend that they purchase. They went away in utter confusion. I think that many shooters try to improve their scores by using a barrel type, which a top shooter is using, as a crutch to improve their scores. I've had barrels made by all of the top barrel makers who cater to the small-bore prone shooter, which have been popular during my shooting career. I found that you can get good barrels and bad barrels, but the majority of people do not know how to bed them properly. My reply to that group of shooters was that if one gets a barrel from a top barrel maker and it is fitted properly to the action and bedded properly, there is hardly a measurable difference between brands, but that stainless steel in my experience definitely bucks the wind, and therein lies a winner.

"With the proper glass bedding job completed and the rifle shooting the tightest desired groups, the **action screws must be tight**. Anyone who shoots a rifle by adjusting the screws to make it shoot is foolish. You have enough variables to fight without this."... (Note: Nothing personal, Pres).

"We come to the most important factor, in my way of thinking, in making a rifle shoot. Each individual has his own tested way of making a rifle shoot. I am not going to run down their ideas, but with 6 years of stock making and bedding, I have yet to find a rifle that would not shoot free floating. Actually, my method of bedding a rifle is not in the true sense free floating, but I do not advise the use of any type of bedder, as I feel that a properly bedded rifle will shoot no better with any type of bedder. I feel that before a bedder can improve the accuracy of a rifle, the ammunition itself will have to be drastically improved upon. It (a bedder) is also a means to an alibi for one's own faults. My system of bedding a rifle incorporates two main operations. The first is that of hand inletting the barrel and action to the stock as close as humanly possible, and then, bedding the action completely solid with glass to take up any small mistakes in inletting. After that, the thing that makes the rifle shoot is the proper amount of tension placed on the barrel just in front of the action. I bed mine in glass, 3 to 3 $\frac{1}{2}$ inches in front of the action. This way, I use this as a dampening action against the barrel, plus giving support to the large barrel. Forward of this 3 to 3 $\frac{1}{2}$ inches, the barrel has at least a 1/16 clearance between it and the stock to insure its not touching in case of warpage in bad weather. Sometimes it might satisfy one's confidence to have a little more clearance."... (Note: insufficient clearance caused some Prone Team members trouble in Europe last summer).

"My stocks are made out of California **claro walnut**—a breed of Calif. walnut and the best European walnut trees bred together—which has been aged at least 10

years and the grain is as straight as possible. Prone shooting stocks cannot have gnarls and curls in the grain and still be relied upon not to warp in sudden changes of weather. This brings up the subject of laminated stocks, which I feel are an advantage over inferior, crooked-grain walnut, but consider that solid straight grain walnut, which has been aged properly, is better than laminated wood. The art in cutting solid wood versus laminated is that then let it age and move for 30 to 60 three major cuts are necessary, not one. The steps are (1) rough cut to shape, and days; (2) a second cut within 1/16 of size, which is allowed to age and move; (3) the final cut, within size, allowing enough for sanding and final fitting. This insures an aged, controlled, solid piece of wood with straight grains, which will stand up a lifetime, where a laminated stock will eventually deteriorate and come apart. It is a definite advantage to use a laminated stock when the desired, aforementioned, wood is not available."

In analyzing the importance of ammo and headspace, Bill remarks, "Most people contend that these determine the way a rifle shoots to a greater degree than does the bedding. I do not. I have found, however, that with the ammunition made today, there is a slight difference in the way the rifle should be headspaced. When an action is barreled, two things should be performed before a barrel is ever installed, and I think that all the top barrel fitters do this automatically. The shoulder of the action, where the barrel turns up tight against it should be faced and trued up. The bolt face should be true with the bore, and the bolt and bolt handle should fit the action snugly, smoothly, and properly. Then, the barrel is installed and headspace set. This eliminates any high spots that occur in factory manufactured equipment. The ammunition made today, although it is denied, are of thinner rim thickness. Also, the bullet diameter has a tendency to be a little smaller. In the last five years this has taken place to the point where rifles which were fitted snugly before are now 1 and 1 1/2 thousandths looser in headspace. It must be pointed out that you cannot expect accuracy from a rifle with too tight a headspace. If you have one that is extremely tight, you are asking for trouble because only one out of 5 or 6 lots of ammunition will fit your particular rifle. Five years ago, I had my rifles headspaced at .0425 to .043. Today, I have them headspaced at .041 to .042. I feel that anyone firing a rifle with under .041 headspace is shooting under a handicap, because if you compress the primer you are going to have a variable point of impact which will drive you to frustration. It is better to have it slightly loose than to compress the primer at all.

"More important is that, instead of setting a certain headspace, you keep that headspace for which the rifle was originally chambered. This you do by alertly cleaning the riding surfaces of the bolt and bolt handle and keeping the proper amount of oil on these surfaces. I have checked wear on two different rifles periodically over a 300,000 round length of time and found that the rifle which was cleaned and oiled properly wore less than .001, but the rifle not receiving this attention wore over .002.

"This brings us to cleaning a rifle. I feel that you should clean these surfaces (mentioned above) every day that you shoot the rifle. I learned the hard way how to clean the bore. You must not abuse the bore by cleaning it too much, but you must keep the bore clean enough to produce accuracy. My newest barrel, which I am now shooting, is the largest in inside diameter of any I have, but has a quirk in it that causes it to foul very readily. This is the first barrel which I have had to clean

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between matches. I do not feel that it is advisable to clean a rifle between matches or any more than once a day, unless you have to. In most cases, a brush of some material—bristle, brass, etc.—must be used to insure the complete breaking up of the residue and fouling. We know that by using a brush, wear will be exerted on the portion of the barrel which the brush enters and for a few inches until the barrel completely grabs hold of it and guides it. Wear is also encountered the last 2 or 3 inches where the barrel loses its grip on the brush and it leaves the barrel. Cleaning too much will cause a bell type action. Consequently, I do not want to ruin or wear out a barrel before it shoots out. It is my opinion that some shooters, who pour liquid Hoppe's or some type of powder solvent down the barrel, run the risk of belling their barrels. This is caused from the pressures exerted by the gas in the bullet on the front portion of the barrel as the Hoppe's comes out. So, we all must know when to clean and not to clean.

"My procedure in cleaning is to run a dry patch through the barrel to take the excess residue and fouling out. With a rod in the barrel, I take the tip off and place a brass brush, which has been immersed in Hoppe's, onto the rod. I draw this back through the barrel until the brush just starts to emerge from the chamber, then reverse the direction. I do this 3 or 4 times or until the fouling is loose, careful not to let any of the solvent drain into the trigger mechanism. I remove the brush and run 2 or 3 dry patches back through the barrel to remove anything left in the barrel, which leaves it completely dry."

As with all phases of accuracy-production, Bill has definite ideas on ammo, which he explains: "I find that when shooting Remington ammo, I have two factors to watch. One is that the powder residue in fouling builds up quicker and affects the accuracy quicker than does Western ammunition. Secondly, Remington by far outshoots Western ammo group-wise, but drifts almost twice as far in windy, rough conditions. My preference is Western ammunition, because rapidly changing wind conditions prevail on our ranges in the West. I feel that I can hold as well as anyone else and that my rifle will shoot as well in calm conditions as any rifle. But, when it gets rough and the 10's count, I don't need the tightest-grouping ammunition; I need the best wind-bucking ammunition. The match can be won by 1/32 of an inch!"

In this illuminating analysis of the finer points of championship shooting, Bill Grater has afforded you an incentive to pursue your own experimentation, and a wealth of information to digest and upon which to deliberate. Next month we'll continue with his approach to such fascinating facets as iron sight shooting, selecting the proper aperture, scope shooting, doping, preparing for a tournament, etc. May I suggest that you give this more than "a once over lightly." Study it! That is, if

ROY F. DUNLAP

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Random Shots

By Betty Summerall Duncan

In this Olympic year, the show of strength displayed by U. S. Army and Marine International rifle and pistol shooters in West Germany, France, and Sweden during the month of May is indeed exhilarating. How unfortunate that there weren't sufficient countries represented for their record-breaking scores to receive World Record status!

Prior to the competition in Wiesbaden, Capt. Verle Wright reported: "We are practicing for our match against the German rifle team next week. Their 50-meter range here is wonderful and we are looking forward to the match. Their 50-meter prone scores are terrific and we should have a good match."

On May 6th, the English Match was more than a "good" match; it was outstanding—that is, from the American viewpoint. Cool, dry weather, with a minimum of wind, provided almost ideal shooting conditions. It was surprising that the West Germans, who are normally very strong over this course, turned in a sub-normal performance. Had they teamed their four top prone shooters together (instead of splitting them up)—Karl Wenk (World Champion for the 60-shot prone event), Kohnke, Harbeck, and Klingner—it would have only improved their team score by 5 points, as Peter Kohnke, who holds the Olympic Record of 590, had an off day.

Individual honors went to Capt. Pres Kendall, USA, whose 596 exceeded the 595 World mark. Second was W/O Jim Hill, of the Marine Corps, with 594. Sgt. Martin Gunnarson, USA, out-ranked Boyd and Harbeck's 592's for third place.

Another 50-meter prone World Record, which is held by West Germany, would have been erased by 6 points (had there been the prescribed number of competing countries) with the 2369 team score fired by the USA #1 team. This power-packed combination included Kendall—1962 National Smallbore Prone Champion, firing an Anschütz with Remington ammo; Hill—1960 Olympic silver medal winner, firing an Anschütz with Mark III; 1/Lt. Lones W. Wigger, Jr., USA—current National Smallbore Prone and Position (Continued on Page Seventeen)

National Bench Rest Shooters Association, Inc.

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NBRSA MEMBERSHIP DUES:

Individual annual dues \$5.00 (includes magazine subscription for membership term). Associate member (wife or husband, son or daughter under 18 years of age, of member in good standing—no magazine) \$2.50. Life membership, \$75.00. Annual club affiliation fee \$10.00.

PRESIDENT'S CORNER

In the November 1963 issue of PRECISION SHOOTING I stated I would have printed a questionnaire in regard to all suggestions and ideas brought before me this year. When the same topic has been brought up by members more than three or four times, it is in the questionnaire. I hope they are worded in such a way that you will have no difficulty in answering them with a simple 'yes' or 'no.' However, should you have any other suggestions or further discussions on any of these questions, you may write additional pros and cons on a separate sheet of paper. I hope each member will take the time to answer this questionnaire. Be sure to sign your name, address and region. This is part of the work to be put on the agenda for the National Meet this year. Each member now has a chance to express his ideas and desires. I hope to hear from each of you now, instead of later when it will be too late.

In the November 1963 issue, I also requested members to submit to me the number and names of new members they had signed up during 1963. To this date I have received a reply from only one member. He is, therefore, the winner of the \$25.00 award for signing the most members in 1963. He is Mr. Arthur Freund, 1038 Hornsby, St. Louis, Missouri. Congratula-

NBRSA MEMBERS' QUESTIONNAIRE

- 1) Are you in favor of Ed McNally's (Best Five) proposal? (Yes —) (No —)
- 2) Do you feel the National Shoot dates should be set dates for each year? (Yes —) (No —)
- 3) Are you in favor of any rifle fired in the N. B. R. S. A. to have a butt stock, regardless of class? (Yes —) (No —)
- 4) Do you feel your Regional Directors are representing you at the National Meeting? (Yes —) (No —)
- 5) Are your Regional Directors answering your letters and questions? (Yes —) (No —)
- 6) Do you feel the President of the N. B. R. S. A. should hold office two years? (Yes —) (No —)
- 7) Do you feel sleeved actions should be allowed on guns under Heavy Varmint Class? (Yes —) (No —)
- 8) Are the clubs you are attending running Registered matches correctly? (Yes —) (No —)
- 9) Are the Range Masters running the shoots too fast for enjoyment? (Yes —) (No —)
- 10) Are you attending many shoots other than your home range? (Yes —) (No —)
- 11) Do you feel the Hunters class experimental matches have brought in new members? (Yes —) (No —)
- 12) Do you think the Hunters class would weaken the N. B. R. S. A. instead of strengthening it? (Yes —) (No —)
- 13) Are you in favor of a hunting rifle class? (Yes —) (No —)
- 14) Do you think the present Sporter class should require a magazine in the action? (Yes —) (No —)
- 15) Do you think the present Sporter rifle requirements should be changed to be like a hunting rifle? (Yes —) (No —)
- 16) Do you think a limit power should be on Sporter class? (Yes —) (No —)
- 17) Do you think 6 power should be the limit on Sporter class? (Yes —) (No —)
- 18) Do you think 8 power should be the limit on Sporter class? (Yes —) (No —)
- 19) Do you think 10 power should be the limit on Sporter class? (Yes —) (No —)
- 20) Do you propose the Light Varmint and Sporter classes should be combined? (Yes —) (No —)
- 21) Are you in favor of using two different calibers in one match or aggregate? (Yes —) (No —)
- 22) Should all Regions have equal bids for National matches? (Yes —) (No —)
- 23) Are all moving backers used on every registered shoot you attend? (Yes —) (No —)
- 24) Are you in favor of prize monies at registered shoots? (Yes —) (No —)
- 25) Do you feel a warm-up match should be required at all registered matches? (Yes —) (No —)
- 26) Are you in favor of National Matches for all classes being scheduled for one major trip each year? (Yes —) (No —)
- 27) Do you feel there are too many Regions in the West and not enough in the East? (Yes —) (No —)
- 28) Are you in favor of dividing into four Regions; thusly, N. E., S. E., S. W. and N. W. Regions? (Yes —) (No —)
- 29) Are you in favor of three Regions, thusly; Eastern Region; North Central, Mississippi Valley and Gulf Coast; Northwest, Southwest, Mid-Continent Combined, and each Region having one Director and two Deputy Directors? (Yes —) (No —)
- 30) Are you in favor of an Eastern and Western National Match scheduled on separate dates with National Champion decided by best aggregate from both sides—to save long-distances of travel? (Yes —) (No —)
- 31) Do you feel that Eastern and Western National Matches would bring more shooters to the National meets? (Yes —) (No —)
- 32) Do you feel the National Matches should be on one site, such as is done at Camp Perry? (Yes —) (No —)
- 33) Instead of disqualifications are you in favor of a shot fired outside of the black border be measured by adding ½ minute of angle at 100 yards and one minute of angle at 200 yards? (Yes —) (No —)

Name
Address

REGION

tions, Art! As you have read, I have made the same offer for 1964.

Most sincerely,
A. W. Walter, Pres.
N. B. R. S. A. Inc.

A LETTER

(Cleared for publication by NBRSA)

Editor: Precision Shooting:

Recent developments indicate that, at the coming Tulsa Nationals in September, I may want to compete with a rifle supported at the rear end by a plain sandbag. Records will show that in '62 and '63 I supported the rear end of the rifle with a contraption of my own design, made of metal, which gave an approximate and so-called "return to battery effect." Some people call these "near machine rests" or "semi machine rests." Such rests, I can say, do have certain advantages. For one thing, they prevent a careless or excited shooter from banging one on the wrong target. Then, they do return to battery close enough so that, in perfect shooting conditions, they allow the lazy shooter to fire his string with the minimum of adjustments and work. They do have some

Mail completed form to:
A. W. Walter, President
1925 Raft Drive
Hanley Hills, St. Louis 33, Mo.

built-in disadvantages, such as not always returning exactly to the same setting and being much more cumbersome when wanting to make quick adjustments when battling a fishtail wind. Also, they are much slower in getting down on the sighting bull for a trial shot during a string, and then getting back on the record bull before your trial shot means nothing.

Now, according to the benchresters' Bible, The Ultimate in Rifle precision, no machine rest can get the ultimate out of any rifle. I would like to get the ultimate out of my rifle, or rifles, at Tulsa but if I use a bag to support the rear end, and do well with it, will this cause hard feelings among the users of mechanical rests and inspire lengthy and critical letters in PS? Letters suggesting that bag supports are an unfair advantage, and all that? I realize that according to our official rules either type of rest is entirely legal. But that is hardly enough to satisfy everyone, as readers of PS can verify. What, if anything, can I do and keep in the good graces of all?

Sincerely,

L. E. Wilson

1964 BENCH REST MATCHES

GULF COAST REGION

Abilene, Texas: Varmint and Sporter Class National Championships, Aug. 7th, 8th and 9th. Programs and information from J. L. Bonner, Box 606, Cross Plains, Texas.

EASTERN REGION

Easton, Ohio: July 25 and 26: Unrestricted, Eastern Region Championship; Chippewa Rifle Club, Nelson Berger, Sec'y, R. D. 1, Box 192, Marshallville, Ohio.

Fassett, Pa.: (All for Varmint and Sporter classes; Eastern Region Championship; July 12; Aug. 30; Sept. 12 and 13; Pa. State Championship; South Creek Rod & Gun Club, Gerald Arnold, Sec'y, R. D. #2, Gillett, Pa.

Wapwallopen, Pa.: (All Unrestricted and Heavy Varmint) Aug. 15 and 16; Council Cup Rifle Range, c/o Robert W. Hart, 332 Montgomery St., Nescopeck, Pa.

Augusta, Ohio: July 4-5 (Unrestricted & H. Varmint), Oct. 17-18 (Unrestricted & H. Varmint, Ohio State Championship). Reed's Run Rifle Range, Box 66, Augusta, Ohio.

Southboro, Mass.: (All Unrestricted) Aug. 2; Oct. 11; Southboro Rod & Gun Club, Inc., c/o J. W. Baldwin, P. O. Box 402, Westboro, Mass.

Canton, Ohio: July 18, Aug. 22; (All Sat. matches, afternoon and night, Varmint class, all at 200 yards). Canton-McKinley Rifle Club, c/o R. H. Johnson, Sec'y, 3118 11th Street S. W., Canton, Ohio.

Johnstown, New York: Sept. 5 and 6; (Unrestricted, Heavy and Light Varmint, Sporter classes) Pine Tree Rifle Club, Inc., c/o Edward J. Sweeney, 501 North Market St., Johnstown, New York.

MISSISSIPPI VALLEY REGION

St. Louis, Missouri: July 18 and 19 (Unrestricted, Heavy and Light Varmint, Sporter-Regional Championship); Aug. 29 (Heavy Varmint-twilight); Oct. 3 (Sporter-twilight); Bench Rest Rifle Club of St. Louis, c/o Arthur J. Freund, 1038 Hornsby Ave., St. Louis, Mo. 63147.

MID-CONTINENT REGION

Hot Springs, Arkansas: Aug. 22 (Var & Spt); Sept. 5 (all classes). Hot Springs Gun Club, B. J. Maddox, Sec'y, 110 Pinewood, Hot Springs, Arkansas.

Kansas City, Kansas: Aug. 1 (night-Unrestricted-Reg. Champ); Aug. 29 (night-H. Var.-Reg. Champ); Sept. 26 (night-H. Var.-non. reg.); Oct. 17 (night-unrestricted). Mill Creek Rifle Club, L. F. Carden, Sec'y, 5022 Waverly, Kansas City, Kansas.

Tulsa, Oklahoma: July 18 (night-Bench & H. Var.); Sept. 16-17-18-19 (Unrestricted National Championship). Tulsa Bench Rest Rifle Club, R. G. Berry, Sec'y, Pawnee, Oklahoma.

Wichita, Kansas: July 4-5 (day and night-all classes-State Champ.); Oct. 3 (night-unrestricted). Wichita Bench Rest Rifle Club, c/o Maj. Richard Hornbeck, Pres., 1640 Windsor, Wichita, Kansas 67218.

NORTH CENTRAL REGION

Buffalo, Wyoming: July 11th and 12th, Mid-Summer Matches; Aug. 30th, Sporter match; Sept. 27th, Hunters match, Buffalo Outdoor Rifle Club, C. C. Hankins, Sec'y, P. O. Box 151, Buffalo, Wyoming.

Iowa Falls, Iowa: July 25 (Spt-nite), July 26 (Var-day), Sept. 19 (Var-nite), Sept. 20 (Spt-day). Iowa Falls Gun Club, Lee R. Boddy, Sec'y, Iowa Falls, Iowa.

NORTHWEST REGION

Seattle, Washington: Aug. 15 and 16, Northwest Championships, four classes. Nov. 22, Turkey Shoot. Puget Sound Benchrest Rifle Club, M. M. Oaklev, Sec'y, 7230 So. 116th, Seattle, Wash. 98178.

Lewiston, Idaho: July 3 and 4; Heavy and Light Varmint-days-Unrestricted Open and Limited-nights). Programs from Raymond G. Speer, P. O. Box 244, Lewiston, Idaho.

SOUTHWEST REGION

Yreka, California: Sept. 5 and 6, Third Annual West Coast Championship, four classes (reg.) Yreka Rifle Club, Ray E. Jones, 508 Knapp St., Yreka, California.

Richmond, California: July 25 and 26, California State Championships, Richmond Rod and Gun Club, Inc., 3155 Goodrick Ave., Richmond, Calif. 94804.

IMPROVED CHIPPEWA RIFLE CLUB RANGE

The Chippewa Rifle Club has completed a major rebuilding and improvement program on their range at Easton, Ohio, where the Eastern Region Unrestricted Bench Rest Rifle Championship Matches will be fired on July 25th and 26th.

The major rebuilding project has been an entirely new, longer, covered firing line, with sturdy benches having plank tops set on cement block legs. The target butts are shorter than the firing line, so the benches have been set on a very slight arc in order that each bench may be exactly the same distance for its target as every other bench.

The new firing line is a few yards in



The new firing line of the Chippewa Rifle Club with its excellent benches. Old firing line (left background) now serves as a loading shed. Photo by Adams, Wadsworth, Ohio.



Looking through the new firing line of the Chippewa Rifle Club range at Easton, Ohio to the target area. Photo by Adams, Wadsworth, Ohio.

front of the old covered firing line and the old line has been retained to serve as a loading shed and shelter for competitors. Another shed shelters the target display rack (Wailing Wall) and tables for eating lunches, and serves as additional shelter for competitors.

Other improvements have been made to improve the attractiveness of the range and to better serve the comfort and convenience of competitors and guests.

A WINTER BENCHREST PROGRAM

By Harry Bente

Late last Fall things got looking kind of dull and Spring seemed an awful long ways off to wait to shoot, so the gang decided that we had better have another Winter Tournament. No sooner said than done. A program was laid out and Breezport (near Elmira, N. Y.) was decided on to be the battle site. Firing com-

menced on January 19th and continued every other Sunday thereafter until the grand finale on April 26th, when the firing was followed by one of the best steak dinners this eater and about two dozen more ever sat down to.

On January 19th, when it all started, we had 12 shooters present to fire the course which consisted of one warm-up and five record groups fired at 100 yards. These were fired on a target especially designed and printed by Lynn Hunt of Rochester, N. Y. who not only furnished the paper and ink but transported them each match to the scene of the shooting personally, just to be certain they arrived there safely. And that ain't as easy as you might think because the last 250 yards is up-hill and three Sundays had snow on it practically knee-deep and naturally had to be traversed on foot. But he did it.

(Continued on Page Twelve)

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Bench Rest Match Reports

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A Winter Benchrest Program

(Continued from Page Eleven)

There was an average of eleven shooters at each shoot. Norm Fahr, Ray Wilson, Art Blensinger, Doc Glover, Harry Kintz, Jerry Arnold, Paul Kempfer and Lynn Hunt all fired the required number of six Sundays to qualify for the grand aggregate. Then we had Ross Sherman, myself, George Stehle and Doc Wheeler who were not fortunate enough to make the required number.

Lynn Hunt won the Grand Aggregate award with an average of .526 for the six Sundays. Norm Fahr was second with .532. Ross Sherman won the trophy for the smallest one-day aggregate. Jerry Arnold won the trophy for the smallest single group fired during the eight Sundays.

These trophies were presented to the winners with appropriate gestures at the



Winners in the winter benchrest shooting program at Breezeport, New York (near Elmira). Left to right, Norman Fahr, 2nd place Grand aggregate; Lynn Hunt, 1st place Grand Aggregate; Jerry Arnold, smallest group for the 8 weeks; Art Glover, Master of Ceremonies at banquet; and Lynn Smith who presented the awards.



Lynn Hunt, winner of the Breezeport aggregate, makes his acceptance speech at the banquet.

dinner which I mentioned before. Doc Glover acted as Master of Ceremonies. Lynn Smith, the well known range officer at Fassett, Pa., made the presentation of the awards. All in all, everyone concluded that the Winter was a complete success and already formulating plans for another tournament next year.

IMPROVEMENTS AT FASSETT, PA.: I went down to Fassett today (early May) to try out a new gun and see how things were going down there (South Creek Rod & Gun Club). They sure are going. The boys have not been loafing very much. They enlarged their clubhouse by building on a new kitchen and scoring room, so that the old part will be entirely available for the use of competitors. The entire inside of the building is all repainted with new windows and all. And the complete outside has been done over in white stucco.

Championships for unrestricted and heavy varmint classes were fired on the West Texas Sportsman Club's new range at Abilene May 2 and 3. The unrestricted class matches were fired Saturday and heavy varmint Sunday. Conditions were about par for this range with competitors having to contend with fishtailing gusty winds and during the calm periods the mirage was pretty tricky, which made conditions, even for the best shooters, hard to decipher. Twenty-five competed in unrestricted rifle class and thirty-four in heavy varmint.

Unrestricted class winners were:

200 yard matches

D. Whittington (warm-up)	1.051"
David Whittington	.862"
F. W. Jarratt	1.252"
Dr. H. W. Ward	1.525"
W. C. Farrar	1.901"
Wm. S. Coleman	1.482"

Aggregate		
Wm. S. Coleman	8.230	MOA
H. E. Powers	.9010	MOA
Robert W. Smith	1.0370	MOA
100 yard matches		
J. L. Bonner (warm-up)	.448"	
J. L. Bonner	.446"	
H. E. Powers	.471"	
Wm. S. Coleman	.490"	
David Whittington	.403"	
Wm. S. Coleman	.413"	

Aggregate		
H. E. Powers	.5690	
J. L. Bonner	.5760	
W. C. Farrar	.6174	

NMC Aggregate		
H. E. Powers	.7350	MOA
Wm. S. Coleman	.7558	MOA
Robert W. Smith	.8680	MOA
J. L. Bonner	.8780	MOA

Heavy Varmint class winners were:

100 yard matches		
Quenton Stanley (warm-up)	.227"	
Jean Bonner	.232"	
Dr. Sam B. Nadler	.192"	
John I. Moore	.242"	
Ernest Mayfield	.317"	
Dr. Sam B. Nadler	.252"	

Aggregate		
Dr. Sam B. Nadler	.306"	
H. W. Spencer	.489"	
L. E. Knollkamper	.496"	

200 yard matches		
H. W. Spencer (warm-up)	.926"	
Dr. H. W. Ward	.956"	
Dr. Sam B. Nadler	.350"	
Thomas B. Summers	.571"	
Lyndina Moore	.727"	
Grady Canter	.907"	

Aggregate		
Wm. S. Coleman	.709	MOA
A. J. Thompson	.779	MOA
R. L. McLaren	.783	MOA

Grand Aggregate		
Dr. Sam B. Nadler	.5920	MOA
A. J. Thompson	.6445	MOA
Wm. S. Coleman	.6447	MOA
R. L. McLaren	.6940	MOA

Horace Powers, Okmulgee, Okla., shot his 220 Powers Special (shortened Swift case) with load of 30 grs. 3031 and his own 55 gr. bullets. His rifle had his own action with Hart barrel.

Dr. Sam Nadler, New Orleans, La., shot a Shilen rifle with Hart barrel with load of 23½ Grs. Ball C-1 and Shilen bullets.

All shooters in both classes shot .22 cal. rifles except Miss Lyndina Moore, who shot a 20 inch Douglas barrel .243 Win. in Heavy Varmint class.

HUNTING RIFLE MATCHES: The West Texas Sportsman Club is holding Hunting Rifle and having a good shooter response. They shoot for score at 100 and 200 yards. They do not indicate what targets are used but the winning scores are high.

ST. LOUIS, MISSOURI

On May 16 the Bench Rest Rifle Club of St. Louis held a registered Light Varmint shoot. It was a twilight match, starting at 200 yds. and finishing at 100 yards under the lights. Conditions were good, light mirage and a mild fishtail wind at 200 with the wind stopped for the 100 yd. shooting. There was good competition from out of town by Dr. Ward from Texas and Tom Gillman and Audrey McDonald from Hot Springs, Ark.

Frank Muriel took first place shooting a 219 Don on a 722 action with a Scherer barrel. Second place went to A. Philip Broderick, who was shooting his first match, shooting a 6mm Int. on a Shilen action with Hart barrel. Third place went to Bill Espy shooting a 222 Mag. in a Hart barrel on a Sako action.

In the second match at 100 yds., 19 year old Robert Freund shot a group that was range measured at .178 inch. This target is being sent to the measuring committee for record recognition. This was quite a come-back for him since he hasn't

shot much since last year due to a serious eye accident. His rifle was a 6mm Int. in a Nu-Line Gun Shop barrel on a 722 action, and a 10X Weaver scope. Load was 31.5 grs. 3031, 73 gr. Freund bullets and RWS primers.

Top aggregates were:

	100 yd.	200 yd.	Grand
Frank Muriel	.5940	.5054	.5497
Philip Broderick	.6016	.5084	.5550
Bill Espy	.5244	.6477	.5860
A. M. Freund	.4482		
Don Hill	.5050		
A. W. Walter		.6163	

HUNTING RIFLE MATCHES: The Bench Rest Rifle Club of St. Louis held a combined Varmint Hunters and Hunting Rifle match May 24th at the Col. Whelen Range.

The Varmint Hunters match consisted of three 5-shot crow targets for score at both 200 and 300 yards. The day was overcast with a fairly strong fishtail wind, which made the shooting a little tricky. First place was taken with a score of 285-3x out of a possible 300 points by Phil Broderick, shooting a 6mm Int. in Hart barrel on Shilen action. Second was A. J. Freund with score of 277-2x shooting a 219 Don on a Model 70 action. Third was A. M. Freund with 273-4x shooting a 219 Don on Shilen action. Both of the Freund barrels were made by Nu-Line Gun Shop.

The Hunting Rifle match was shot on bullseye targets for score—three 5-shot groups at each 100 and 200 yards for a possible 300 score. By afternoon the sun had come out and the Hunting Rifle shooters had a heavy mirage to contend with.

First place in the any sight category was Ed Pomery with score of 284-7x, shooting a factory M-70 Win. in 30-06, with 4X Weaver scope. Second was Kenny Immekus with 283-6x, shooting a Sako .243 with Redfield 8X scope. Third was Dr. Richard King with 282-8x, shooting an FN Mauser in 30-06 with 8X B&L scope.

First in iron sight category was Vince Dillon with score of 295-12x, shooting a 10½ lb. Springfield 30-06. Second was C. W. Jobsky with 285-5x shooting a military M-1. Third was Carl Gorden with 271-5x shooting a 722 Rem. in 257 Roberts, gun weighing 7½ lbs. All six of the place winners were first time competitors in benchrest.

The first place silver bowl in both Hunting Rifle categories was donated, through the effort of George Cardon, by the St. Louis Globe-Democrat. Five of the competitors in these matches have since become club members.

Arthur M. Freund
CANTON, OHIO

Seventeen shooters competed in the Canton-McKinley Rifle Club's 200 yard Varmint Matches on May 16 and 17. Ranking in these matches is on score but group aggregates in MOA are listed. The top ranking five match aggregates were:

	cal.	score	group
Gottschall	222½	250-19x	.5796
Rucker	308	250-19x	.6448
Glen	222½	248-14x	.7489
Johnson	6mm Int	247-17x	.6743
Anderson	222½	247-16x	.7258
Rinehart	219 D	247-14x	.6474

TULSA, OKLAHOMA

Eight shot unrestricted bench rifle and twenty varmint rifle at Tulsa on May 17th. Bud Carden won the unrestricted aggregate with .529 MOA and shot small group at both 100 yds. (.324) and 200 yds. (.932"). Ed Garrott had second agg. with .616 and Walt Berger third with .698.

Allan Hall was first all the way with Varmint Rifle, having .508 at 100 yds., .715 at 200 and grand agg. of .611. Jack Morgan was second with .729 and Nolan Rammage third with .746. "Red" Cornelison was 2nd at 100 yds. with .530 and Jack Morgan 2nd at 200 with .724. Tulsa Club secretary Bob Berry had small groups

(Continued on Page Fourteen)

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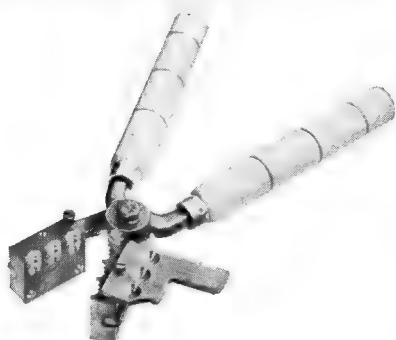
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Winners in Heavy Varmint Rifle shoot at Mill Creek Rifle Club, Kansas City, Kansas. Back row, left to right; James Coonce, 5th place; Stephen Sauner, small group at 100 yards; Marshall Johnson, 2nd place; Nolan Jackson, 4th place. Front row, Bernard Geenens, 1st place; and Larry Engelbrecht, 3rd place.

Bench Rest Match Reports

(Continued from Page Thirteen)
at both 100 yds. (.126") and 200 yds. (.590") and was 3rd in the 100 yd. agg. with .571.

KANSAS CITY, KANSAS

The Mill Creek Rifle Club held its first match of the 1964 season Saturday, May 23rd, a heavy varmint match with 16 shooters. Three of these were new shooters and one of these, Stephen Sauner, using a standard Sako, fired the small group at 100 yds. .245". Larry Engelbrecht shot the small group at 200 yards, a .540".

The top five aggregate shooters were:

	100 yd.	200 yd.	Grand
Bernard Geenens	.415	.5670	.491
Marshall Johnson	.532	.5265	.529
Larry Engelbrecht		.5255	.533
N. H. Jackson	.469		.547
James Coonce	.534	.5635	.548
Wm. Carber	.539		
Stephen Sauner		.5615	

FASSETT, PENNSYLVANIA

On Sunday, May 24th, we (South Creek Rod & Gun Club) held our first registered shoot of the season. We expected about 20 shooters. Much to our surprise and delight there were 41 shooters when we got done with the registration and weighing of rifles.

This caused some real commotion in the kitchen as we were prepared to serve 50 or 60 and we knew now that there would be over 100 to eat dinner. The women soon had this under control and we were started on a very enjoyable day of shooting.

It was a beautiful day in the low 70's and there was a mild wind which later in the day became quite brisk, as the scores indicate.

There were 3 gold trophies given to the winner of each class; Jerry Arnold, Heavy Varmint (31 competitors); Don McClure, Light Varmint (4 comp.); and Paul Kempfer, Sporter (6 comp.).

The high ranking grand aggregates were by:

	Heavy Varmint
Jerry Arnold	.4946
Ross Sherman	.6257
Omar Rinehart	.6277
Robert Hart	.6310
Arthur Blensinger	.6885

Light Varmint

Don McClure	.5682
C. Fullmer	.8154
Dave Hall	.8725

Sporter

Paul Kempfer	.6944
Dave Hall	.8468
Don McClure	.9650

Jerry Arnold

YREKA, CALIFORNIA

For the Memorial Day Bench Rest Matches at Yreka, Calif., May 30 and 31, the weather was warm and not too windy, but tricky. High aggregate rankings in the various classes were by:

Open Bench Class (9 comp.)

	100 yd.	200 yd.	Grand
Felix Marincovich	.4266	.7439	.5853
George Fullmer	.4792	.6975	.5884
Al Hobbs	.5132	.7308	.6220
Wally Titus	.4544		
Jess Franklin	.4546		

Limited Bench Class (10 comp)

Ray Speer	.4426	.7919	.6173
Wally Titus	.4982	.8217	.6600
Don McLennan	.5918	.8595	.7257
Richard Silva		.7844	

Heavy Varmint Class (15 comp)

Al Hobbs	.5356	.5939	.5648
Tom Squires	.5700	.5895	.5798
Ed Suchan	.6410	.5704	.6057
Richard Silva	.5056	.7170	.6113

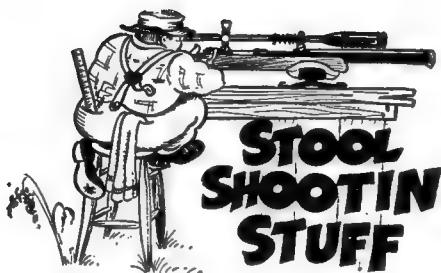
Light Varmint Class (7 comp)

Ed Suchan	.6558	.8004	.7281
Ray Jones	.7414	.8894	.8154
Dale Strawn	.8514	.9864	.9189
Ken Jones		.8941	

SOUTHBORO, MASSACHUSETTS

Fourteen shot the five 5-shot and five 10-shot at 100 yards match course at the Southboro Rod and Gun Club registered shoot for Limited Bench class rifles on June 7th. Shooting conditions were excellent, an overcast sky following a night of drought relieving rain, with little mirage and light to moderate winds.

J. Kohler won the grand aggregate gold medal with a .4160 aggregate average; Bob Stinehour took the silver with .4865; and Mary Hoolidge the bronze medal with .5505. There were two first-time bench match shooters with one, Walter Watson, doing better than several competitors with several years experience.



Dear Phil:

Merrie and I are rolling through the mountains of Pennsylvania after a weekend of shooting at the Eastern Region Varmint Championship matches at the South Creek Rod and Gun Club in Fasset. It was two years ago since I shot out there before and although the range facilities have been greatly improved, the range conditions are about as rugged as any we come up against. The unpredictable currents that slide down from those hills and swoop up and down the target faces certainly make problems for the shooters. I really don't believe that I have ever seen more ornery conditions and although practically everybody got hurt in one match or another, a spirit of good cheer and good sportsmanship prevailed and I think there were few people who did not enjoy the shoot. I think Ross Sherman expressed well the feeling of many of us when he told me that he had never been to a two day shoot before when he felt he had acquired so little new knowledge. Usually a little bit at a time, a fellow gets a chance to become familiar with different ranges and recognize some of their idiosyncrasies but South Creek is very baffling. At any rate, there wasn't much chance for anyone to break records. Although I went to the match fully prepared to see my 200 yard sporter record topple, the conditions were just too bad for it ever to really be in danger. It is bound to happen sooner or later because the boys are beginning to find what makes the light guns tick and nowadays one sees lots of small groups on the wailing walls.

Not only is the range one of the most beautiful and refreshing that we have been to but it is also the home of a sizable group of light rifle shooters. They have many matches for the various varmint classifications throughout the season as well as hotly contested turkey shoots in the fall. The shooters' wives pitch in and one gets the feeling that the entire membership is in back of the club's success. Certainly for a match where 79 guns were shooting in three classifications per day, the range detail showed excellent efficiency and the targets were scored and posted exceptionally promptly.

We are getting a lot of good range officers in the circuit and for a long hard job well done, we have to take our hat off and make a deep bow to Lynn Smith. There was no favoritism shown and what I liked most about the job is that he did it in a manner of leadership rather than bossing us around. Never did I detect a cranky note among the many thousand words he spoke into the microphone.

Lynn is a good shooter in his own right but he elected to forego that pleasure to do the range job while a range officer's holiday was taken by Wally Hart who came to South Creek to do a good shooting job. Wally has been shooting well since he was a little fellow and he certainly showed most of us how to do it throughout the matches. He not only was in the top rank in all of the classifications but took the heavy varmint by a considerable margin. Paul Gottschall showed the way in the sporter class and Bob Hart edged out Wally in the light varmint. Last night when the trophies were being given out at the club house, it looked like two out of every three were being passed from the display shelf across to the table at which Bob and Wally were sitting. These tro-

phies were a tribute to the shooting ability of these two men and also a high commendation for the new actions which they are making. Wally shot one of the latest of these.

The action itself is ruggedly built around a Remington bolt and the Remington type trigger, and uses the same screw hole spacing as characteristic of the 722's. This is a good feature for fellows who have nice stocks available for the installation of this new action. Only a slight amount of re-scrapping and fitting is required to drop the Number One or smaller of the actions in place. The Number Two action weighs 2 lbs. 15 oz. and incorporates a cantilever type support for the front base of the target scopes. It is my opinion that this is a very excellent feature because experience has shown that light barrels do not shoot their best when holes are drilled in them for scope blocks and the scopes are resting partly on the receiver and partly on the barrel. One of the most important features of this sight base is that it is counter bored with a rugged shoulder that pulls up tight against the forward end of the threaded section on the outside of the receiver. This system adds strength and stiffness around the receiver at a critical point and at the same time eliminates the Remington type recoil plate since the back of this unit serves as a recoil shoulder.

The family of Hart actions is further developed by action Number Three which is a heavy varmint model weighing 3 lbs. 6 oz. Number four unrestricted action is one of the heavy front sleeve jobs.

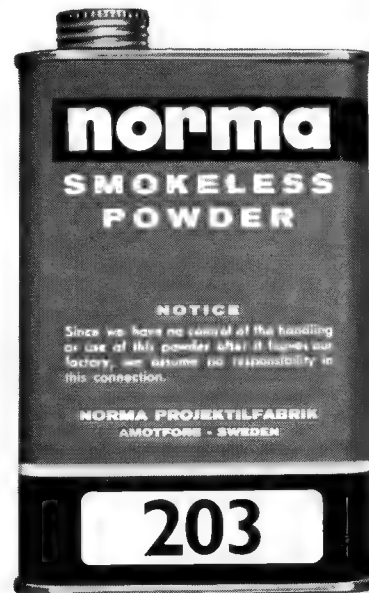
Wally Hart shot Number Two model in a barrel that was only 22" long and chambered for 6 X 47. He used a common load of Ball Type C powder of about 29 grains. These loads should be approached with caution because slightly more than this stretched my 6 X 47 cases so that they would no longer enter my Pool die.

Paul Gottschall feels that 4198 powder is better for this caliber with a 70 grain bullet, especially if the shorter barrels are being used. His load of 234 grains worked fine in my gun. I think there are few people with the experience in the 222 family of cartridges as broad as that of Paul. Since 1954, he has concentrated on them and poured countless thousands of rounds through his barrels. He is very fond of the cartridge family and has gotten many of the shooters out of their 222 troubles.

In later years, Remington put out a heavier case, probably in order to increase the factor of safety for the people who abuse hand loading. This use of thicker brass necessarily reduced the powder capacity and if some of the old loads are used in the new cases, excessive pressure and blown primers will result. The net result is that the new cases do not deliver the same velocity that the older ones did, and since the best accuracy is usually obtained at little less than maximum load, it is doubly wise not to overload these cases. A little tolerance usually pays dividends in most accuracy loads and since we like to drive the bullets 3200' per second or above, it is probable that this added tolerance available in the 222½ has accounted some for the success of this wild cat cartridge which probably as it is loaded today does not exceed much the original velocities of the hot 222 loads of earlier days.

Both Mike Walker and Warren Page are off on an African expedition and it is the first time they have missed these Eastern Region National matches for a number of years. We missed them but their blood pressures are probably lower for not having been there. However, Mike Walker especially would have been elated to notice that a large number of 40X's were being used on the line and they were in the hands of capable shooters. With the exception of the third place which Wally

(Continued on Page Sixteen)



YOURS?

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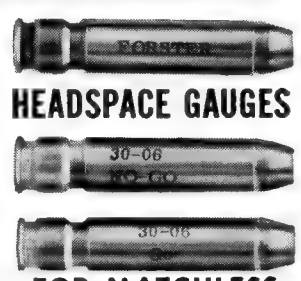
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Stool Shootin' Stuff

(Continued from Page Fifteen)

Hart took, the first four places in the sporter matches were won by boys using the 40X rifle. There are more and more sales of these rifles being made and if their owners exercise care in their reloading and shooting techniques, they will find they have in their possession a gun which is hard to beat. There are more luxurious guns, of course, but few more efficient. I would encourage the boys who have these rifles not to hesitate to enter competitive shoots. The frequent inclusion of new names on the winners list is one of the heartening signs of the game.

Bausch and Lomb sent three representatives to the matches to make a further survey of the telescope situation. Their Balvar 24's can often be made to come within the 13½ lb. weight limit of the heavy varmint classification and the optical qualities of the scope as well as the variable feature endear them to me. I, like many others, have complained about the rear mount and to a lesser extent about the tapered cross hair type reticle. No readily available answer has come for the former complaint but the factory people have come up with the improvement which seems very desirable, pertaining to the reticle. For \$20, they will replace this with a new type, pretty much eliminating the objectionable feature which occurred when the crosshairs obliterated so much of the aiming point. In the present model, the crosshairs do not come entirely to the center but break off uniformly, leaving space for a truly round ¼ minute dot. A smaller dot than this is liked by many but when conditions are really tough and the mirage running badly, too small a dot becomes a very objectionable feature as it cannot be seen readily under such conditions and study has shown that eye strain accounts for many losing shots. Anyway, I have mailed my scope back to Mr. Palmer in the Consumer Goods Division of Bausch & Lomb at Rochester for this change.

We missed you, Phil, at the South-boro shoot. The day was pleasant and John Kohler gave us a good trimming. He started right out by making that .219 of his talk loud and clear and didn't let up much through the day. He had been down to Crawford Hollidge's range most of the day before and it was apparent then that his combination was pretty formidable. You will recall that last year I wrote you that ball powder didn't work out particularly well in my .219 because of a powder fouling condition that was characteristic of all the loads I tried. Yet here was a case where John was shooting Ball Type C2, 29½ grains and which was performing beautifully with no apparent signs yet of powder fouling in his gun. All this is just an example of something that bears repeating—that guns are very unpredictable and what might be meat for one is poison for another.

John was throwing his loads with his Belding & Mull powder measure. This measure is used by a fairly large percentage of the benchrest clan who generally stroke the lever from three to half a dozen times to assure maximum uniformity. It is amazing to see how uniform many of the boys can throw these charges—so close indeed that it takes a very good scale to detect even an occasional variation. John further improved his measure by making a new receptacle for the thrown charge to replace the calibrated model that comes with it. He determined that 27½ grains was the best load for his gun and turned out a piece of round stock to fit smoothly in place of the standard tube. He then drilled out the end slightly deeper than required for his chosen charge, with a ¼" drill. This made the cut off area smaller and John feels further improved the accuracy of the uniformity of the thrown charges. He merely faced off the end of

the tube to give him exactly 27½ grains. The smaller exposed area of powder also had an advantage because on a windy day, one can be plagued by losing some of the powder before it is transferred to the cases.

George Wyatt was getting some pretty good groups out of his gun which was a modification of a system which appears from time to time on the benches. This consists of using 5" or 6" of the rear bottom of the barrel as the bedding surface on the stock. George mounted a half section of aluminum tube tapped and screwed in place on the barrel as a base on which to mount his scope blocks. The whole assembly was fastened in place with a hose clamp. The receiver from the recoil plate black was free floating and so was the barrel forward of the 5" or 6" of the bearing surface on the stock.

Clarence Detsch who is an especially good workman showed us a stubby little receiver that was designed particularly for a light weight rifle and which conceivably could be part barrel bedded only. Clarence's job couldn't have been much more than 3" long and was designed for back feeding the cartridges as the bolt was removed each time. The unit is well made and adequately strong but not tested enough yet to prove its merit and convenience.

There aren't many better workmen who attend the shoot than Ross Sherman. He makes the buttons and the drills and many of the reamers for both Clyde and Bob Hart. Last year he experimented with some bullet dies and I have two beautiful sets which he made me in 6 m/m and 22 caliber size which feature tungsten carbide steel inserts in the swaging areas. This is a hard and expensive job, necessarily being quite costly because of the methods required for construction and finishing. The bullets, however, coming from these units are beautifully shaped and the dies should last for many years if properly cared for. Ross has recently gone in to production in all steel bullet die sets. In these, he uses a superior grade of steel and the dimensions which he adheres to are very close indeed. We need these quality dies in the field and for personal use, they will withstand wear entirely adequately. The workmanship that goes into bullet making dies must necessarily be superior if the finished product is to lead the field and I am certain that Ross's backlog of orders will soon mount, as has been the case with others who made superior products.

The lubricant which I spoke about in last month's column, called EZ-SIZE worked out marvelously for sizing Donaldson cases. Cases can't be sized properly without a lubricant, at least, not sized well enough to give us the accuracy that we need in benchrest shooting. The non-fitting case in the chamber will presumably fill out to chamber size if a stiff enough load of powder is used but we want the wall thickness of this new case to be as uniform as possible. This will not occur if the case cannot move within the chamber as it is being sized. To some extent, this same rule applies in full length sizing and the lack of lubricant can cause some very thin places in the brass wall as a case is stretched up to a new dimension.

Mr. Hunter has rightly pointed out that there is some hazard in using maximum loads with an exceptionally slick lubricant and warnings have been put out before his about the excess pressure that occurs on the locking lugs if no gripping effect at all takes place between the outside of the cartridge and the chamber wall. The greater the taper, the less the gripping, of course, and so caution must be exercised when fire sizing loads with EZ-SIZE. It is hardly conceivable that the cream of wheat system could exert too much pressure. I have never been too fond of this system because I believe that most of us have enough second quality bullets around

to make it worth while to seat the bullet out pretty far in the case and thus assure that the base is firmly back against the bolt face. This system, of course, can be conducive to pressure.

Cordially yours,

Ernst Stühlichter

Random Shots

(Continued from Page Nine)

Champ, shooting a 52D with Mark III, scoring 591; and M/Sgt. William E. Krilling, USA—U. S. National Int'l Champ and English Match Champion, firing an Anschutz with Mark III, and totaling 588.

USA #2 team of Boyd, Wright, Adams, and Green placed second—2352. Third spot went to USA #3 team of Gunnarson, Kolstad, Foster, and Allen—2345. The Deutsch #2 team, with 2342, outshot their #1 team's 2331.

Equipment-wise, Anschutz was by far the most popular rifle. In addition to Wigger's 52D, Wright's Hammerli, and Gunnarson's Remington, the only deviations from Anschutz were Walthers fired by Harbeck and Marx. R50 was used exclusively by German shooters. All U. S. team members used Mark III, with the exception of Kendall.

"In all the major international events held during the last six years, West German shooters have been found to belong to the absolute world top class in the small-bore rifle contests,"—quoting from *International Shooting Sport*, February 1964. This statement lends even greater stature to the fantastic scores fired by U. S. shooters in the 3-positional smallbore.

The "Old Pro," Capt. Verle F. Wright, Jr., USA, turned in the ranking 1150, determined on the basis of his high prone score of 396. Also firing 1150 were Klaus Zahringer, whose 1149 World Record was beaten in 1962 by Gary Anderson; and, Kendall and Krilling, who had identical 3-stage scores, with Kendall having the greater number of 10's.

Once again it was disappointing that our scores could not be officially recognized. Our team score of 4583 would have surpassed the 4569 World Record, held by the USSR, by 14 points!!! Winning-team members were: Kendall, Krilling, Wigger—1146, who fired the 52D prone but switched to an Anschutz for kneeling and standing; and Sgt. David Boyd, USMC—1137 . . . The West German team of Zahringer, Wenk—1143, Kohnke—1131, and Klingner—1131, placed second with 4555 . . . In third place was our #2 team of Wright, Kolstad, Foster, and Hill, scoring 4548.

Jim Hill fired a beautiful 399 prone score. The record of 398 is held by Jensen of Denmark . . . The West Germans redeemed themselves with an excellent 1585 prone team score, 11 points over their own World Record.

Kneeling proved to be our specialty, as our team of Kendall—388, Krilling—388, Wigger—390, and Boyd—389, posted 1555 which, incidentally, is 18 points over the Russian World Record . . . Gunnarson's 370 was the high individual standing score.

The West Germans finally hit their stride at 300-meters and led by a 7-point margin—4506 to 4499—which was a heartening turn of events for them, and a new German Record. They, apparently, had not expected to win this event. By the same token, our shooters were surprised that the Deutschlanders had not made a better showing in the 50-meter English Match.

High individual winner at 300-meters was Jim Hill, who outranked Wenk's 1133. The third winner was Kendall, shooting 1132.

Firing commenced in windy conditions, and as they were shooting in the open, Wright and Krilling shot standing

first, in anticipation of the wind's getting worse. It proved to be a bad calculation, however, for that was when conditions were roughest. Wright was also handicapped by trigger trouble in the prone stage.

The winning team was composed of Wenk—1133; Pilch—1131, Harbeck—1125; and Zahringer—1117 . . . USA #1—Hill—1133, Kendall—1132, Krilling—1128, and Wright—1106.

Krilling was high prone—395; Kneeling: Harbeck, 382; Standing: Pilch—368, a German record.

Equipment used by German shooters was identical—: Swedish Johansson actions, Finnish Lion barrels, Anschutz stocks and sights, and Finnish 7.62 MM ammo, which has greater velocity than the loads used by U. S. shooters.

American team members had Hart barrels, Remington actions, .308 ammo, with 39 and 41 grains of DuPont 3031 powder.

For a brief run-down on pistol results—: In *Free Pistol*, 50-meters, Burchett was high individual and Blankenship, second, both scoring 561 (determined on the greater number of 10's) . . . The U. S. Team of Burchett, Blankenship, Wessel—537, and Thompson—531, defeated West Germany—2190 to 2164.

Rapid-Fire Pistol, 25-meters—Schreyer (West Germany)—585, Mosely—584, Blankenship—583, Ogden—583 . . . Teams: U. S. #1—2324; West Germany—2285.

Centre-Fire Pistol, 25-meters—Blankenship—592, Thompson—591, Cochrane—589. . . . Teams: U. S. #1—2334; West Germany—2310.

U. S. shooters were guests of the West German team at a banquet at the conclusion of the matches, and the following day enjoyed a boat trip up the Rhine River to Rudishiem. Bill Krilling wrote, "The sportsmanship is really wonderful."

Leaving Germany on May 12th in rented Volkswagen buses, they drove 640 kilometers across France to Paris in a one-day "wild ride" on narrow roads and through Paris traffic, which we understand is a real challenge in itself.

The French, being noted more for their culture than technology, proceeded with match and range organization at a leisurely pace. Finally, on May 15th, our shooters managed to get in a little practice, the day before the matches. We were unable to shoot all of our men because of a shortage of firing points.

Wind was variable at 6-9 mph and reversing. "You were hurting if you aimed and the wind changed." The first 40 shots of the English Match counted in the 3-position score.

Dave Boyd was high individual in the English Match with a 590. Team winner was our #1 team of Green—588, Boyd, Krilling—583, and Kendall—582, for a 2343. . . . The French team scored 2320, a point ahead of our #2 team, composed of Wigger, Allen, Kolstad, and Adams.

In the 3-position match, Lones Wigger led with 1142. Remaining #1 team members were: Kendall—1138, Boyd—1129, and Krilling—1128, to win with 4537 . . . Our #2 team of Kolstad, Green, Adams, and Allen placed second with 4474.

One of the most spectacular performances was at 300-meters, with BILL KRILLING in the driver's seat. This fellow is unbeatable when he gets going. With a fabulous 1155, he was 5 points over the World Record held by Hollenstein of Switzerland!!!

Second in importance only to Krilling's feat was the 4570, scored by our team of Krilling, Hill—1138, Kendall—1142, and Foster—1135. This tops our own 4557 World Record, established during the Pan-Am Games a year ago, by 13 points . . .

(Continued on Page Eighteen)

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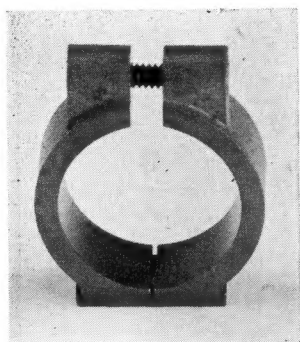
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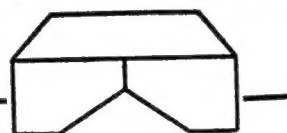
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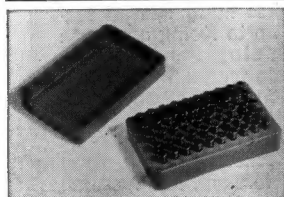
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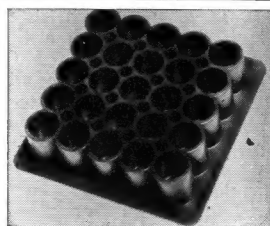


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Random Shots

(Continued from Page Seventeen)

This was despite Kendall's having a little gun trouble. He took his rifle down after the kneeling stage and found the recoil lug rubbing. That corrected, he fired an excellent standing score . . . The French team totaled 4237.

Hospitality extended by the French shooters included a banquet featuring the famed French cuisine . . . On May 18th, the U. S. contingent returned to West Germany to await plane connections to Sweden.

The clear, fresh air in Sweden was a subject of favorable comment. (One would have to live in Los Angeles to fully appreciate it) . . . Tricky winds blew with great velocity, with swift changes in direction. Competition was challenging—so much so that the English Match went to the Swedish #1 team. The host shooters were "right at home" in their kind of wind. Still, **Pres Kendall** won the match with a creditable 592!

Scoring 2355, the breakdown of Swedish team scores is as follows: Johansson—589, Poignant—586, Sunberg—591, Wigger—589 . . . The U. S. #1 team of Hill—583, Kendall—592, Boyd—589, and Wigger 583, had 2347 . . . Sweden #2 team shot 2342, while our #2 team was 3 points behind.

With winds still strong and variable, scores fired in the 50-meter, 3-position match were almost unbelievable. **Bill Krilling** led with 1148, followed by **Boyd**—1147, **Wigger**—1146, and **Kendall**—1139, for a 4580—still 11 points over the Russian World Record. . . . Our #3 team of Gunarson—1135, Green—1132, Adams—1128, and Allen—1127, piled up 4522 points to place second over our #2 team which fired 4512 . . . A Scandinavian team placed 4th, composed of Jensen of Denmark—1125, Landro of Norway—1132, Sunberg of Sweden—1109, and Poignant of Sweden—1138, for a 4504 score . . . The Swedish team was 5th with 4487, and Norway, 6th—4486.

300-meter scores show the effects of the powerful, shifting winds, but the U. S. #1 team won, as Sweden placed second. **John Foster's** 1124 was good for high individual honors. He also won the standing with 368. **Krilling** was runner-up in the aggregate with 1122, and won the kneeling with 379. Landro, from Norway, was third with 1121. Poignant, of Sweden, was high prone with 392. He will undoubtedly represent Sweden in the Olympics, as will Landro shoot for Norway.

As I've observed a number of times, more genuine international friendship and understanding are created among our shooters than can ever be achieved at the conference table.

Col. Kiefer, from USA MTU, was officer-in-charge of this extremely successful Olympic warm-up and good-will tour.

Tournament Circuit

(Continued from Page Five)

Grosskopf with the same score) and 4th in the grand with 1577-80. H. Reid Horner, Freeport, Ill. was 5th in the grand with 1576-75 and Ed Roth, Elmhurst, Ill., 6th with 1576-72.

Expert Ray Matsusheta, Shiller Pk., Ill., won the opening match, 100 yds, any, and was 8th in the grand with 1574-69. Eugene Naas, Chicago, was 7th in the grand with 1575-80. Gene Stamm, Peoria, 9th, 1572-75, and L. Schmiedl, Chicago, 10th, 1572-74.

FORT BENNING, GEORGIA

The All-Army Rifle and Pistol Matches were fired at Fort Benning, June 6 through 11, with generally sunny skies and temper-

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atures in the mid-ninety's throughout the period.

Those shooting in the All-Army matches compete not only for individual Army championships, but also for berths on the All-Army and Army Area teams which will later compete in the National Matches at Camp Perry.

It took really top scores to win matches and aggregates in both the rifle and pistol programs. Some illustrative winning scores were:

RIFLE: National Match Course, two top scores 249-28V and 249-23V. Rapid fire championship 400-34V, 600 yard championship 397-55V. "Leg" match 249-22V and 249-16V.

PISTOL: .22 cal.—slow fire 195-8x; National Match Course 298-10x; Timed fire 200-15x (with two shooters tied—shoot-off scores were 200-12x and 200-8x); Rapid fire 200-16x; Aggregate 889 and 888.

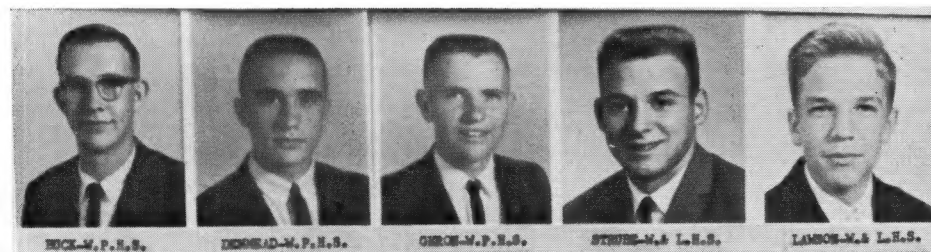
Center Fire—slow 194-6x; NMC 297-15x and 296-16x; Timed 200-17x; Rapid 200-12x; Aggregate 880.

.45 caliber—Slow 194-4x; NMC 294-8x; Timed 199-13x; Rapid 199-8x; Aggregate 873.

Grand aggregate 2627-121x and 2626-103x. "Leg" match 293-13, 292-15 and 292-11x.

VIRGINIA ALL-STATE TEAM

The Junior and College Committee of the Virginia State Rifle and Revolver Association has announced the members of the 1964 Virginia All-State Scholastic Rifle Team to be (left to right in the photo):



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DENMEAD-W.P.S.S.

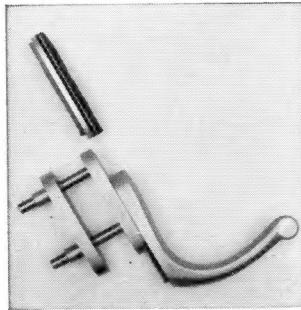
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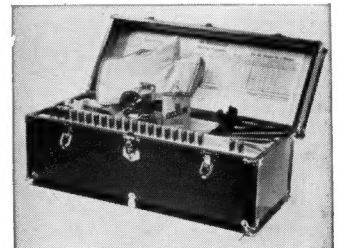
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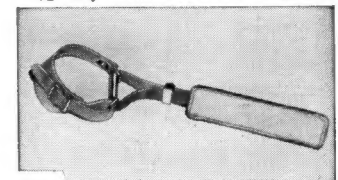
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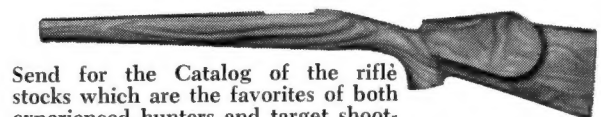
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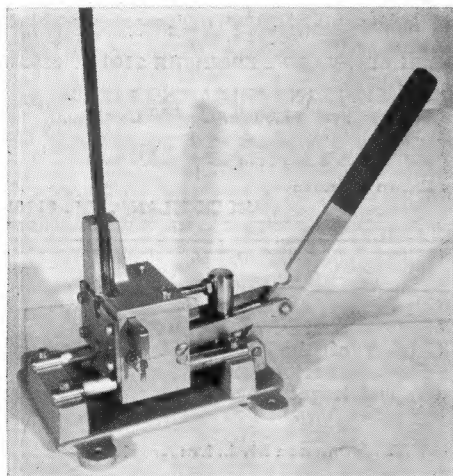
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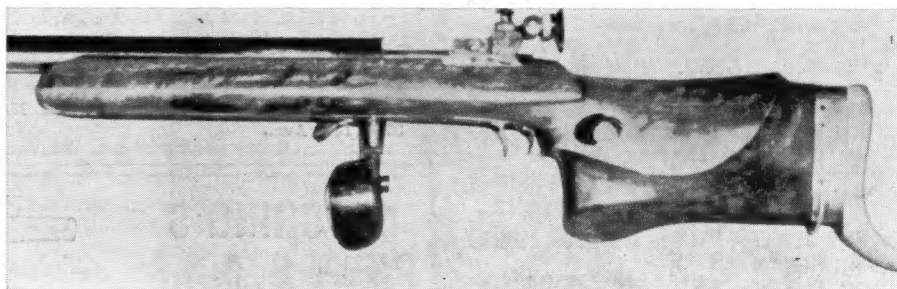
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